DOCUMENT RESUME

ED 155 129 SP 011 844

AUTHOR	Dickson, George E.; And Others
TITLE	Planning Teacher Education Research and Evaluation in Ohio. Final Report.
INSTITUTION	Toledo Univ., Ohio. Center for Educational Research and Services.
SPONS AGENCY	Educational Testing Service, Princeton, N.J. National Commission on Performance-Based Education.; Ohio State Dept. of Education, Columbus.
BUREAU NO	BR 419
PUB DATE	77
NOTE	125p.
AVAILABLE FROM	Center for Educational Research and Services, College of Education, University of Toledo, Toledo, Ohio 43606 (Free of charge)
EDRS PRICE	MF-$0.83 HC-$6.01 Plus Postage.
DESCRIPTORS	Decision Making; *Educational Research; *Evaluation; Fundamental Concepts; Goal Orientation; Higher Education; *Planning Meetings; Policy Formation; *Research Coordinating Units; Research Needs; *Statewide Planning; *Teacher Education
IDENTIFIERS	*Ohio

ABSTRACT

A planning project for the identification of research and evaluation efforts in teacher education to be undertaken in the state of Ohio is described. The planning project's philosophy was that all elements of the teacher education community should be involved in the planning of directions for teacher education research and evaluation (R&E) and that they should be mobilized to participate in R&E to the extent feasible and appropriate. The project focused on state-level planning, but national and local levels were also considered. Chapter One, "An Introduction to Research and Evaluation in Teacher Education," discusses the nationwide concern for teacher education R&E and its related subject, teacher effectiveness. Chapter Two, "Planning for Research and Evaluation in Teacher Education--An Overview," concentrates on the background materials provided to project participants. Chapter Three, "Results of Planning for Research and Evaluation Associated with the CBTE Program of the University of Toledo," presents results of planning at the local level. Chapter Four, "Results of Planning for Research and Evaluation at the State Level: The State Planning Group Meeting," describes a statewide planning group meeting involving representatives of colleges, universities, public and private schools, teacher associations, and the Ohio State Department of Education. Chapter Five, "Concluding the Planning: A Synthesis of Planning Results," presents outcomes of the R&E planning project, which include: increased awareness of R&E in teacher education and its potential effects on the design of teacher education in Ohio; the identification, classification, organization, and prioritization of needed and desirable research and evaluation for Ohio; and a plan of action for initiating and conducting useful research and evaluation. (MJB)

ED155129

Final Report

PLANNING TEACHER EDUCATION RESEARCH AND EVALUATION IN OHIO

Project Co-Directors
George E. Dickson
William Wiersma, Jr.

Project Staff
Thomas C. Gibney

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
George E. Dickson
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND THE ERIC SYSTEM CONTRACTORS."

A Planning Project Sponsored
by
Project 419, Year II, State of Ohio Department of Education
Columbus, Ohio
and
National Commission on Performance-Based Education
Educational Testing Service
Princeton, New Jersey

Center for Educational Research and Services
College of Education
The University of Toledo

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

Summer 1977

SP011 844

CONTENTS

Preface 5

1. AN INTRODUCTION TO RESEARCH AND EVALUATION IN TEACHER EDUCATION 7

   Research on Teacher Effectiveness 8
   Evaluation of Teacher Effectiveness 14
   Relationship of Research and Evaluation in Teacher Education 19
   The State Planning Project for Research and Evaluation in Teacher Education 23
   The Sponsors of the Planning Effort 23

2. PLANNING FOR RESEARCH AND EVALUATION IN TEACHER EDUCATION — AN OVERVIEW 29

   Executive Committee 30
   Position Papers 31
   Local Planning Group Meeting 32
   State Planning Group Meeting 32
   Concluding Remarks 47

3. RESULTS OF PLANNING FOR RESEARCH AND EVALUATION ASSOCIATED WITH THE CBTE PROGRAM OF THE UNIVERSITY OF TOLEDO 49

   Characteristics and Assumptions Underlying the Toledo CBTE Program 49
   Research and Evaluation of The University of Toledo CBTE Program 51
   Local Planning Group Meeting 54
   A Project Related to Local Planning 58

4. RESULTS OF PLANNING FOR RESEARCH AND EVALUATION AT THE STATE LEVEL: THE STATE PLANNING GROUP MEETING 65

   Context for the State Planning Meeting 65
   Membership of the Planning Group 66
   Specific Information for SPG Members 66
   The State Planning Group Meeting 66
   Group Discussion Reports 69
   State Planning Group Meeting Concluding Activities 83

5. CONCLUDING THE PLANNING:
A SYNTHESIS OF PLANNING RESULTS 87

General Characteristics of Research and Evaluation Projects 87
The Balance Between Basic and Applied Research 87
The Internal Comprehensiveness Necessary for Useful Research 88
Research and Evaluation: The University of Toledo CBTE Program 89
Program Evaluation and Program Validation 90
Organization For Program Evaluation and Validation 93
Synthesis of State Planning Group Results 95
Needed Research and Evaluation 97
Coordinating and Funding Research and Evaluation in Ohio 102
Summary of State Planning 107
The "Bottom Line" 108

Appendix 111
Position Papers 111
Meeting Topics and Questions 120
Participants Attending the Local Planning Group Meeting 123
Participants Attending the State Planning Group Meeting 124
Research and Evaluation in Teacher Education Needed and Identified for Ohio 126

Preface

How does one go about planning for research and evaluation in teacher education at a state level, or any level for that matter? Teacher education has typically been an area practically devoid of systematic and quantitative research. The research results that have been used have been generated predominately by related disciplines, usually psychology and sociology. The majority of the evaluation that has been done has been subjective and based primarily on individual courses and individual teacher education students.

However, the "state of the art" of research and evaluation in teacher education should not be viewed as all bad. Certainly, related disciplines have contributed useful research results to teacher education. Accumulated experience and knowledge count for something, and evaluation based on such experience, although subjective, should not be summarily dismissed as irrelevant. But the time has arrived in teacher education at national, state, and local levels to pursue research and evaluation more systematically, more comprehensively, more quantitatively, and more aggressively.

Few would argue against the need for research and evaluation in teacher education, but there would be disagreement on how to go about it. One approach would be to allow projects to be planned and completed wherever interest arose. Another approach would be to center research in major, prestigious institutions, possibly even subcontracting it to external agencies interested in research and evaluation. The former approach has the disadvantage of being dependent on chance manifestations of interest. The latter approach has the disadvantage of lacking comprehensive involvement of those most concerned with teacher education. There would be resistance to accepting results from "outside" experts.

There is a third approach: To involve all elements of the teacher education profession in the planning, and to mobilize the elements to participate in research and/or evaluation to the extent feasible and appropriate. This approach, too, has a disadvantage. Much effort and resources must go into the planning and maintenance of the research and evaluation. Nevertheless, in the long-run and even the short-run, this approach logically appears most promising. Moreover, if usable research results appeared they would be credible to the profession. Evaluation procedures are much more likely to be institutionalized if the potential user has contributed to their development.

The third approach described above is the one taken in this planning project. The major focus was on the state level, but national and local levels were also considered. The association with the National Commission for Performance-Based Education has been a source of information about what is going on nationally. More importantly, it provides a channel for continuing research efforts, and for Ohio participation in such efforts at a national level. Eventually, research and evaluation projects must be conducted in a proper local setting.

The planning involved all elements of the education profession concerned with teacher education: universities and colleges, school teachers and administrators, teacher organizations, and the State of Ohio Department of Education. Methodology for planning was essentially developed as the project progressed. An executive committee was formed for the project and all elements were represented on that committee. Appropriate meetings were held on both local and state levels.

Planning meetings cannot be held in an intellectual vacuum. Therefore, a series of position papers about research and evaluation in teacher education were developed for the various elements to be involved in the planning. Background information was used to establish a context for the planning, so those involved would at least know "where we were coming from." It is just as important to know where we are going. The planning efforts synthesized thinking and helped formulate research and evaluation problems. Equally important was a course of action for attacking the problems. Therefore, throughout the planning and especially during the State Planning Meeting, we attempted to focus on ways that would be feasible for continuing the research and evaluation efforts discussed, actually initiating those efforts in a systematic way. Considerations for continued funding of a coordinated approach to research and evaluation in teacher education were included.

The preceding paragraphs describe an approach taken to planning. The subsequent pages provide the results of such planning. Many people were involved. Much information was synthesized, disseminated and discussed. Many ideas were generated; some were discounted; some were retained. At least some sorting of problems and procedures was done to arrive at a feasible course of future activity. What follows in this publication is an account of an approach to planning, the context in which it was conducted, the people involved, the procedures, and the results.

Chapter 1

AN INTRODUCTION TO RESEARCH AND EVALUATION IN TEACHER EDUCATION

Those affiliated with teacher education programs (whether they be the more traditional, experienced-based or the more recent competency-based) should all know one truism about teacher competence and accountability in education. It is one thing to develop programs to prepare supposedly competent teachers, but it is quite another matter to determine if graduates of such programs are indeed competent professionals and, hopefully, more effective than graduates have been in the past. The problem, basically, is that of determining the elusive relationship between training experiences, teacher behavior, pupil behavior and pupil outcomes.

Formerly, teacher educators, teachers, and the general public have not been too concerned about this problem because all have somehow assumed that an individual experiencing a program of teacher education would be, **ipso facto,** able to handle and educate children in the classroom with some degree of academic success. There has never been much developed in the way of evidence to support such a belief, it has just been accepted as the seemingly obvious. But with the coming of the competency-based teacher education movement, there has been far more focus on teacher performance and competency, and what people used to take for granted about successful teacher behavior and resultant pupil outcomes is now being challenged daily.

We know that teaching performance is a function of teachers' backgrounds, knowledge, attitudes and aptitudes. We think that pupils' learning, behavior, attitudes and achievements have something (probably a great deal) to do with teaching performance. More and more there is general public interest, even a demand, to discover whether what teachers do in classrooms results in positive behavior and increased learning for children. Cruickshank and Kennedy at The Ohio State University stated that an " . . . overriding objective—to relate patterns of teaching behaviors to student outcomes—addresses one of the most crucial research problems in teacher education."[1] Such concern can be labeled "The Research and Evaluation of Teacher Education Effectiveness."

1. Donald R. Cruikshank and John J. Kennedy, "Research in Teacher Education," JOURNAL OF TEACHER EDUCATION, 27 (Winter 1976): 315.

Research on Teacher Effectiveness

The study of teachers and teaching effectiveness has long fascinated educational researchers and evaluators. As long ago as 1953, the American Educational Research Association Committee on Teacher Effectiveness reported:

> . . . after forty years of research on teacher effectiveness during which a vast number of studies have been carried out, one can point to a few outcomes that a superintendent of schools can safely employ in hiring a teacher or granting him tenure, that an agency can employ in certifying teachers, or that a teacher education faculty can employ in planning or improving teacher education programs.[2]

Ten years later Getzels and Jackson made the following conclusion after reviewing research on teacher characteristics and attitudes and their relationship to teaching effectiveness:

> Despite the critical importance of the problem and a half-century of prodigious research effort, very little is known for certain about the nature and measurement of teacher personality or about the relation between teacher personality and teaching effectiveness. The regrettable fact is that many of the studies so far have not produced significant results. Many others have produced only pedestrian findings. For example, it is said after the usual inventory tabulation that good teachers are friendly, cheerful, sympathetic, and morally virtuous rather than cruel, depressed, unsympathetic, and morally depraved. But when this has been said, not very much that is especially useful has been revealed. For what conceivable human interaction—and teaching implies first and foremost a human interaction—is not the better if the people involved are friendly, cheerful, sympathetic and virtuous, rather than the opposite? What is needed is not research leading to the reiteration of the self-evident but to the discovery of specific and distinctive features of teacher personality and of the effective teacher.[3]

---

2. American Educational Research Association, "Second Report of the Committee on the Criteria of Teaching Effectiveness," JOURNAL OF EDUCATIONAL RESEARCH, 46 (1953): 657.

3. J. W. Getzels, and P. W. Jackson, "The Teacher Personality and Characteristics," HANDBOOK OF RESEARCH ON TEACHING, Chicago: Rand McNally and Co., 1963. p. 574.

About the same time, Cyphert and Spaights concluded a research project that analyzed recent research in teacher education conducted over a ten-year period prior to 1964. They found that recent research in teacher education tended to focus on five main areas, namely:

(1) Present practices in teacher education,

(2) Characteristics of personality associated with various teacher behaviors,

(3) Aspects of training and experience associated with different kinds of teaching behavior or criteria of teaching success,

(4) Comparative effects of different methods of educating teachers and other educational personnel, and

(5) The emergence of the behavioral systems approach in which methods are developed for recording and analyzing effective teacher performance to the end that this information can serve as a decision making base for selecting desirable teacher education content.[4]

Openshaw agreed with Cyphert and Spaights and further urged inquiries to be focused on developing insights into the complete range of teacher and pupil behavior and their interaction as a basis for selecting content and learning experiences in teacher education.[5]

In 1971, Peck and Tucker completed a ten-year review of research on teacher education and indicated that it was their "strong impression that a quantum leap occurred, somewhere between 1963 and 1965, in the quality of both the design and the reporting of research in this field."[6] Their summary of research indicated the following themes which have relevance to a consideration of teacher effectiveness:

> First, it was noted that a "systems approach" to teacher education substantially improved its effectiveness and that this approach worked equally well to induce desirable teaching behavior in cognitive and in affective respects. Much of the research in this area clustered around three special

4. Frederick R. Cyphert and Ernest Spaights, AN ANALYSIS AND PROJECTION OF RESEARCH IN TEACHER EDUCATION. USOE Cooperative Research Project, #F-150, Columbus, Ohio: The Ohio State University Research Foundation, 1964. pp. 105-6 and 303.

5. Karl Openshaw, "The Corkscrew Path," JOURNAL OF TEACHER EDUCATION, 16 (June 1965): 233-37.

6. Robert F. Peck and James A. Tucker. "Research on Teacher Education," in Robert M. W. Travers, (ed.) SECOND HANDBOOK OF RESEARCH ON TEACHING. Chicago: Rand-McNally Co., 1973. p. 941.

cases of systems models: training teachers in interaction and analysis, micro-teaching, and behavior modification.

Second, it was found that teacher educators should practice what they preach. When teachers are taught in the same way they are supposed to treat their pupils they are more likely to adopt the desired style of teaching behavior.

Third, there is the indication that direct involvement in the roles to be learned, or in such close approximations as sensitivity training laboratories or classroom simulation laboratories, produced the desired teaching behavior more effectively than remote or abstract experiences such as lectures or instructional theory.

Fourth, it was reported that, using any and all of the techniques just mentioned, it was possible to induce a more self-initiated, self-directed, effective pattern of learning, not only in teachers, but through them, in their pupils.

Fifth, the more trational ways of educating teachers have some of the intended effects, but they also have some quite undesired effects. For example, as students move through teacher training programs and get closer to becoming teachers, they tend to become less humanistic and more custodial. The most influential content in the teacher education program in terms of impact on students' perceptions and values seems to be the nature of the supervising teachers with whom they are placed, and student teacher changes are largely in the direction of their modeling themselves after their supervising teachers. Most student teachers start out by being shocked and horrified at what their supervisors do but end up imitating them on the basis that what works justifies their actions in the classroom. There also seems no evidence that the general-liberal studies that comprise much of the teacher education program are necessary for performing as a teacher.

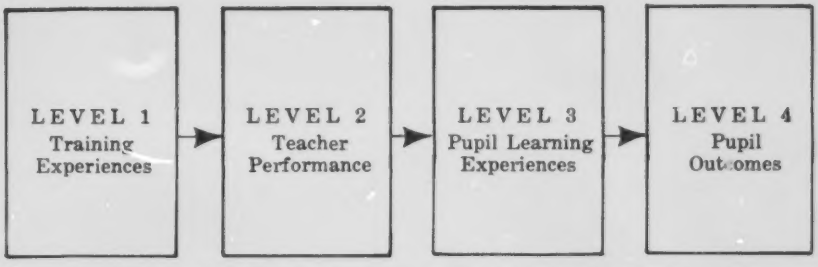
Sixth and finally, one long-needed methodological advance in teacher education research is beginning to appear: the use of pupil-gain measures as the ultimate criteria of the effectiveness of any given process of teacher education. These include affective and behavioral gains as well as gains in subject mastery.[7]

---

7. *Ibid.* p. 943.

The foregoing brief summaries of general research findings in teacher education indicate a long-standing concern about the teacher effectiveness problem. Most teacher educators continue to have a firm conviction that a teacher does have a role in accounting for educational outcomes but the needed evidence for this conclusion is far from complete. The facts are that there have been relatively few studies on teacher effectiveness from which to derive generally effective teaching behaviors. As Haberman and Stinnett have declared, "The real number of studies that support the installation of any specific teaching behavior as a competency for future teachers is smaller than prudence requires. . . ."[8] What needs to be empirically established is the relationship between teacher behavior as an independent variable and student or pupil cognitive and affective outcomes as dependent variables.

Teacher educators involved with any type of teacher training program ought to be concerned with empirical evidence linking teaching behavior to student outcomes in classroom settings. Such concern is deceptively simple to state but tremendously complicated when completely examined. What is being discussed can be shown in a paradigm developed by Medley, Soar and Soar (See Figure 1).[9]



ASSESSMENT LEVELS IN TEACHER EDUCATION

(Medley, Soar and Soar)

Figure 1

These researchers indicate that there are four different levels where teachers may be assessed. **Level 1** refers to the training experiences for those preparing to be teachers. **Level 2** refers to a teacher's be-

8. Martin Haberman and T. M. Stinnett, TEACHER EDUCATION AND THE NEW PROFESSION OF TEACHING. Berkeley: McCutchan Publishing Corp., 1973. p. 118.

9. Donald Medley, Robert S. Soar, and Ruth Soar. ASSESSMENT AND RESEARCH IN TEACHER EDUCATION: FOCUS ON CBTE. Washington, D.C.: American Association for Colleges of Teacher Education, June 1975. p. 2.

havior in the classroom. How does he organize the lesson? How does he ask questions? How does he manage the pupils? Obviously, there is the general assumption that a teacher's behavior in the classroom has a definite relationship to the training experiences he has undergone. **Level 3** refers to the behavior of pupils, the kinds of tasks they perform, what they do in various class situations so that there is some basis for determining any amount and degree of pupil learning taking place. Pupil learning is under the guidance of teachers who have exhibited particular teacher behaviors which are assumed to have resulted in particular pupil behavior. **Level 4** refers to the outcomes of instruction, the changes in pupil behavior that are the purposes of education. In particular, we should be interested in how well pupils read, how well they perform mathematically, how well they write, what kind of citizens they are, etc. Such outcomes are again assumed to be influenced by pupil behavior which should be influenced by teacher behavior which is hopefully influenced by teacher training experiences.

We know further that all of these things are influenced by many other factors not shown in the paradigm such as socioeconomic status, home and living conditions, the school setting, pupil and teacher characteristics, etc. However, the entire business of teacher education has been based on the assumptions that despite all of these additional factors, the influences, that can be determined at each of the levels in the paradigm, are powerful enough to have a noticeable effect, level upon level. Here is a reasonable concept of teacher effectiveness: Pupils can learn particular things in response to particular teacher acts; as instructional acts are performed, there is a predictive power related to pupil achievement.

Such thinking is the basic justification for the very existence of teacher education. Teacher educators believe that what happens to a teacher in teacher training can somehow lead to that teacher's effectiveness in affecting pupil learning outcomes. The basic concern has been, and continues to be, the establishing of empirical relationships between teacher education or training—teacher behavior—pupil behavior—and pupil or student outcomes.

The evaluation and/or research activity necessary to establish the empirical relationships just presented is complex. Our knowledge about the procedures and techniques of teacher training far exceeds what we know about the effectiveness of teaching skills and the utility of concepts. We should begin such thinking with the humbling possibility that teachers may only minimally affect student

achievement and that other factors such as family background, ethnicity, socioeconomic background, etc., are more powerful. This conclusion has been suggested by the Coleman report (1966), Jencks (1972), and Heath and Nielson (1974).[10] However, such conclusions are premature and incomplete because research on the effectiveness of teacher education is hampered by many factors. Berliner has provided a comprehensive summary of such problems and impediments.[11] However, we must not misinterpret Berliner's remarks. His paper does not say that research in teacher effectiveness is **impossible.** He does say that it is **difficult** and that people both within and outside the profession should stop viewing such research as simple and stop looking for short-range solutions.

One of the past difficulties with teacher effectiveness research has been with the persistent use of univariate, dependent variables, when in fact, the real life situation in the schools is one of multivariate outcomes. Peck arrives at this conclusion when he states:

> . . . .what is needed is research that reasonably reflects the multivariate nature of real-life learning and the interacting effects of teacher and learner characteristics as they affect important outcomes of education.[12]

Doing research with multivariate outcomes is more sophisticated than dealing with single dependent variables, but the major difficulty in the past has not been the added sophistication but the persistence in attempting to research teaching as something different than it is. The first step in conducting such research is getting off in the right direction: Identifying the research problem for what it really is. With previous research contributions and recent operational research studies in teaching effectiveness,[13] a reasonable and useful context for teacher education effectiveness research has been developed. At

---

10. J. S. Coleman, et al. EQUALITY OF EDUCATIONAL OPPORTUNITY. Washington, D.C.: U.S. Government Printing Office, 1966.
C. Jencks, et al. INEQUALITY: A REASSESSMENT OF FAMILY AND SCHOOLING IN AMERICA. New York: Basic Books, 1972.
R. W. Heath and M. A. Nielson. "Performance-Based Teacher Education." REVIEW OF EDUCATIONAL RESEARCH, 44 (1974): 463-84.

11. David C. Berliner, "Impediments to the Study of Teacher Effectiveness," JOURNAL OF TEACHER EDUCATION, 27 (Spring 1976): 5-13.

12. Robert F. Peck, "Needed R and D in Teaching," JOURNAL OF TEACHER EDUCATION, 27 (Spring 1976). 18.

13. See, for example, reports on Phase II of the Beginning Teacher Evaluation Study, conducted by the California Commission on Teacher Preparation and Licensing and supported by the National Institute of Education. Section on "Research in Teacher Education," JOURNAL OF TEACHER EDUCATION, 27 (Winter 1976): 315-339.

the very least, an argument for considerable emphasis on teacher effectiveness research has been presented and is being widely discussed.

Evaluation of Teacher Effectiveness

An emphasis on teacher effectiveness research must also be accompanied by similar attention to education program evaluation and validation. Evaluation of instruction is basically a process. The heart of the process is valuing or making comparisons. Evaluation takes place when data are compared to some standard or norm and a decision about good or bad, accept or reject, or pass or fail is made. Such valuing or comparisons may take a variety of forms as Wiersma has pointed out, " . . . — between the scores of two or more groups, an observed and predicted score, actual and anticipated performance, and between a criterion and achievement toward meeting that criterion."[14] The process of measurement is the gathering of data while the analysis of the data and the actual placing of a value on comparisons or values made with it is the process of evaluation.

What is significant about the new forms of teacher education, called competency-based or performance-based (CBTE or PBTE), is that such training systems call for systematic evaluation of both the training model and its products. Such teacher training programs force educators to accept responsibility for their activities and their graduates. Consequently, competency-based or performance-based teacher education programs have required those engaged in teacher training to become far more concerned with program and product evaluation than they have ever been heretofore.

Organized evaluation of teacher education graduates and programs has been limited or non-existent. Until recently, most of such effort has been left to teacher education institutions that have consistently failed to evaluate their graduates, primarily because of the profession's inability to determine what constitutes effective teaching. Also, there has been a decided lack of proper evaluation tools and techniques. The problem was not that teacher educators lacked the ability to acquire the knowledge and select the instruments and techniques for making evaluative decisions. Rather, the situation seems to have been a general lack of effort in this direction, or as has been indicated previously, an assumption existed that such evaluation was not really necessary.

---

14. William Wiersma, Jr., "Evaluating Instructional Effectiveness," JOURNAL OF TEACHER EDUCATION, 27 (Fall 1976): 238.

The competency-based teacher education movement has changed such thinking. Although teacher educators may not relish the possibilities or implications inherent in teacher education evaluation (product and program), they are increasingly unable to ignore it. Systematic evaluation of teacher training models and graduates is definitely called for now and in the future.

Findings of previous teacher education evaluation efforts are difficult to collate and summarize. This is due to the individual and isolated nature of previous evaluation efforts. However, the need for evaluating teacher education programs and graduates in an era of educational accountability is easier to support. In making the argument for evaluation, the more recent concerns for teacher education evaluation will be reviewed.

In 1970 new standards for the accreditation of teacher education were adopted by the National Council for the Accreditation of Teacher Education (NCATE). The preface to a significant standard of this document stated, "The ultimate criterion for judging a teacher education program is whether it produces competent graduates who enter the profession and perform effectively . . . . " The standard itself further stated, "The institution conducts a well-defined plan for evaluating teachers it prepares."[15] NCATE made it quite clear that the evaluation of teacher education programs and graduates would be necessary for institutions seeking NCATE accreditation.

The 1970s have further witnessed similar accountability efforts on the part of state departments of education and/or special state commissions in respect to teacher education program standards and teacher certification. Some of the states involved in such efforts have been Washington, Oregon, California, Utah, Texas, Vermont, New York, Florida, New Jersey and Ohio. The State of Washington established a new set of standards for approval of teacher education programs which became effective in September, 1971. Under these standards, preparation programs were developed and implemented by a consortium of agencies involving colleges and universities, school organizations, and professional associations. The consortium was charged to describe the roles to be assumed by persons to be granted specific certificates and to identify and state the rationale for the competencies required of persons who planned to perform the roles described. Washington continues to issue teaching certificates on the basis of an approved consortium program approach. The standards are process and performance standards.

15. STANDARDS FOR THE ACCREDITATION OF TEACHER EDUCATION, Washington, D.C.: The National Council for Accreditation of Teacher Education, 1970, p. 12.

The State of Oregon created a new teacher standards and practices commission which has full legal authority over teacher certification, de-certification, and teacher education. Progress has been made in defining teacher competencies and developing a process for competency demonstration. Further, the new commission has adopted standards for the evaluation and approval of teacher education programs and conducts on-site examinations of these programs. The commission has also established rules for certification and authorizes colleges to develop programs to prepare candidates to meet these rules. The commission has pressed for standards of practice and continuing education that promote a "lifelong commitment to competence."

The State of California also has a separate commission which handles teacher preparation and licensing. This Commission for Teacher Preparation and Licensing has established guidelines for teacher preparation programs and authorized basic types of teaching and service credentials. Of considerable import is a statewide program of evaluation that requires an external assessment system for the review and evaluation of professional preparation programs at all institutions of higher education in California. Further, the Commission has established and been involved in broad planning and research activities related to the Beginning Teacher Evaluation Study, a multi-year, multi-million-dollar research project funded through the National Institute of Education.

Utah has adopted a set of performance criteria for the use of instructional media and such competencies must be not only demonstrated but performed satisfactorily. Very specific performance criteria are provided which are utilized by teacher education colleges as objective and evaluative criteria.

The State of Texas has been well publicized for its effort to establish a statewide system of competency-based teacher education. The Texas Education Agency first mandated such teacher preparation programs but then backed off as academic forces made their opposition known.

Vermont expanded its decision-making base on the certification of educational personnel to include local school districts. Such districts must submit evidence that the teachers, school board, and administrative personnel have participated in the planning and development of the program which must also include provision for job description, task analysis, and performance criteria for all educational personnel under certification consideration.

The New York State Department of Education has essentially mandated competency-based teacher education for its 102 institutions of higher education having teacher education programs that are approved by and registered with the State Education Department. All teacher education programs are currently being revised in a competency-based format. More than 300 elementary and special education programs, both graduate and undergraduate, have made the shift to CBTE since 1975 and are now state approved. The evaluation essentials of the CBTE movement in New York are succeeding.

Florida and New Jersey have considered approved program approaches and content standards as provided in competency-based programs. Performance criteria have been developed and the direction and final results of such efforts emphasize evaluation.

The Ohio Department of Education has adopted a new set of teacher education standards that require the defined instructional objectives necessary in a body of knowledge, skills, attitudes and values needed in teacher education programs. A complete description of the teacher education curriculum is required with a heavy emphasis on clinical and field-based experience. The standards dictate evaluation procedures in teacher education that must be met by all Ohio higher education institutions by July 1, 1980.

It is obvious that many states are steadily working, in various ways, toward the evaluation of teacher education programs and the students prepared in such programs. Standards of various types, most of which involve performance criteria, have been developed and are being implemented.

Another type of effort to evaluate teacher education programs and its graduates is contained, for example, in a project conducted at Western Kentucky University titled, **Illustrated Model for the Evaluation of Teacher Education Graduates.** This has resulted in the development of a model for the evaluation of teacher education graduates at Western Kentucky University. The model proposes that evaluative data be derived from four categories: (1) career line data; (2) direct classroom observation; (3) pupil, peer and supervisory evaluations; and (4) standardized measures. Considerable data have been collected on teacher education students and these data have been analyzed with simple analysis of variance techniques. The analysis of the data revealed a number of expected outcomes but also unsuspected relationships between indirect teaching and various desirable teaching behaviors. The model developed at Western Kentucky University could be incorporated by other teacher education institutions with positive results.[16]

16. J. T. Sandefur and Ronald A. Adams, "An Evaluation of Teaching: An Interim Research Report," JOURNAL OF TEACHER EDUCATION, 27 (Spring 1976): 71-76.

As one delves more thoroughly into the subject, it becomes apparent that the degree to which teaching competencies are attained and mastered is far more important than how well individuals perform in relation to their peers. Criterion-referenced evaluation becomes more important and more needed than norm-referenced evaluation. Whether the graduates of training programs have achieved criterion-level performance becomes more important than how high or low they stand in relation to others in the program. Criterion-referenced evaluation is only possible when level of performance and criteria are pre-defined and specified. Teacher education programs need to state their objectives clearly in behavioral terms and these, with performance criteria attached, serve as standards for judging preservice student performance. Further, criterion-referenced evaluation aids the diagnostic process and provides the teacher education student with more precise instructional direction that helps him to ascertain his learning difficulties more easily. In judging competency from a criterion-referenced standpoint, it is always more important to include more than a single type or occasion of measurement. Those being evaluated must be required to demonstrate competence in classrooms of various types before they can be truly certified as having met adequate performance standards.

Although it has always been thought possible to evaluate teaching competency by assessing pupil learning, there are many measurement and evaluation issues to be settled before such efforts can be undertaken in an intelligent and fair manner. It is not the purpose of this monograph to go into these issues specifically because they have been delineated by numerous writers in other, more comprehensive, sources.[17] The basic problem is that any evaluation or appraisal system developed or implemented must be comprehensive enough to evaluate multiple criteria and use multiple methods. It must be repeated that there is decided lack of research evidence

---

17. For example, see:

Theodore E. Andrews, (ed.). ASSESSMENT, Albany, New York: University of the State of New York, the State Education Department and Division of Teacher Education and Certification and the Multi-State Consortium on Performance-Based Teacher Education, 1974.

Gary D. Borich. THE APPRAISAL OF TEACHING: CONCEPTS AND PROCESS, Reading, Mass.: Addison-Wesley Publishing Co., 1977.

See the articles on "Research on Teacher Effects," THE JOURNAL OF TEACHER EDUCATION, 27 (Spring 1976): 5-66.

Barak Rosenshine and Norma Furst, "Research on Teacher Performance Criteria," in B. O. Smith (ed.), RESEARCH IN TEACHER EDUCATION: A SYMPOSIUM. Englewood Cliffs, N.J.: Prentice-Hall, 1971. pp. 37-72.

Barak Rosenshine and Norma Furst, "The Use of Direct Observation to Study Teaching," in Robert M. W. Travers (ed.) SECOND HANDBOOK OF RESEARCH ON TEACHING, Chicago: Rand McNally and Co., 1973. pp. 122-183.

linking teachers' specific knowledge and performance competencies to pupil outcomes. Such considerations involve a relatively high risk of error since variables unrelated to teacher behavior and abilities may account for pupil behavior and outcomes in the classroom. Nevertheless, the current evaluation and appraisal direction is to make inferences about teacher behavior from pupil achievement because the presence of certain pupil behaviors is considered evidence that specified teacher behaviors have occurred. Despite the high risk of error and other problems in such appraisal procedures, evaluation systems are increasingly adopting the approach of considering pupil outcomes as a measure of teaching effectiveness.

Obviously, attention to evaluation in teacher education has grown during the 1970s. It is likely that attention in this area will continue and increase. Consequently, any effort to plan and develop the evaluation of teacher education programs and graduates is timely.

Relationship of Research and Evaluation in Teacher Education

Research and evaluation in teacher education can have different objectives and different end results. However, a clear relationship definitely exists between them in generating modern, accountable, programmatic efforts in teacher education and in determining the results to be obtained from such programs. Borich, in particular, indicates this close relationship between research and evaluation in his book on **The Appraisal of Teaching: Concepts and Processes.**[18] In the first portion of his volume, Borich covers five topics that concern the definition of teacher competencies, measuring teacher performance, applications of performance appraisal systems, using appraisal techniques and procedures, and developing a valid appraisal system. The second portion of his book contains selected readings to support the initial discussions of the five topics. It is certainly evident from a review of the volume that any consideration from the definition of competencies through the development of valid appraisal systems must include a harmonious research and evaluation effort. A similar conclusion is reached when one examines the **Journal of Teacher Education** issue devoted to "Research on Teacher Effects"[19] and the results of Phase II of the Beginning Teacher Evaluation Study as reported by McDonald and his associates in the Winter

---

John D. McNeil and W. James Popham, "The Assessment of Teacher Competence," in Robert M. W. Travers (ed.) SECOND HANDBOOK OF RESEARCH ON TEACHING, Chicago: Rand McNally and Co., 1973. pp. 218-244.

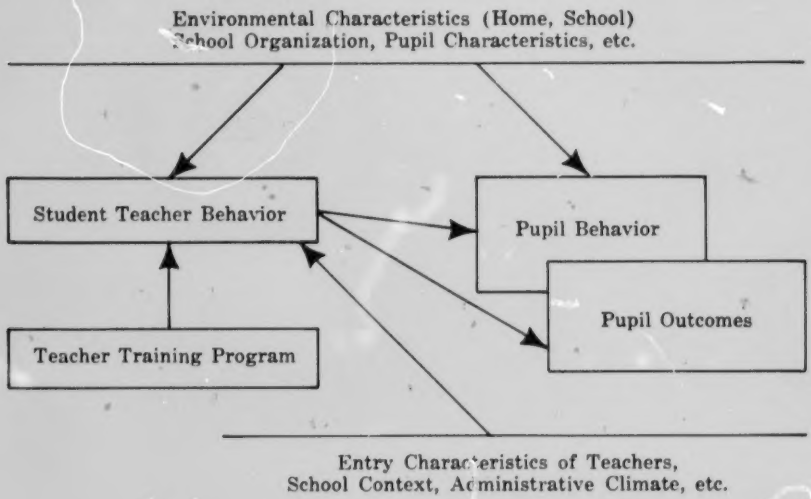
18. Gary D. Borich, *Op. Cit.*

19. *Op. Cit.*

of 1976 issue of the **Journal of Teacher Education.**[20] The close linkage of research and evaluation is obvious and necessary in terms of any consideration of teacher behavior and teaching effectiveness.

Further examples of the convergence of research and evaluation in teacher education are contained in two research paradigms developed by The University of Toledo and Oregon College of Education in Monmouth, Oregon. Both of these institutions have fully developed, operating CBTE programs and both have planned and partially implemented ongoing research and evaluation that will result in program validation and evaluation.

The program linkages to be investigated in The University of Toledo CBTE program are represented in the paradigm titled, "General Model of Effects in CBTE," (Figure 2.)[21] Each arrow in this figure stands for a class of studies. Each class is comprised of research and a large number of variables. The arrow connecting



GENERAL MODEL OF EFFECTS IN CBTE

(Medley, Soar, and University of Toledo Research Staff)

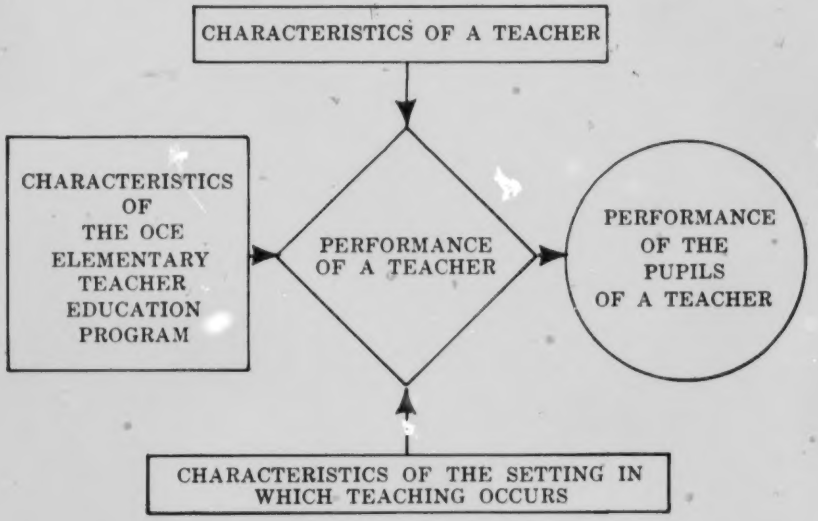
Figure 2

20. "Research in Teacher Education," JOURNAL OF TEACHER EDUCATION, 27 (Winter 1976): 315-339.

21. George E. Dickson (ed.) Educational Comment I/1975: RESEARCH AND EVALUATION IN OPERATIONAL COMPETENCY-BASED TEACHER EDUCATION PROGRAMS, Toledo: The University of Toledo, 1975. p. 106.

Teacher Training and Teacher Behavior is to a great extent the evaluation of the program; the entire effort will constitute program validation. The principal goal is to establish the connective links that are presented by the paradigm. This can be done through a coordinated series of correlation and experimental studies. The correlation field studies should provide a broad enough base to assess the relationships between variables and several typical educational settings. Significant relationships between teaching strategies and pupil outcomes in a particular school context would suggest potentially valuable experimental studies. The experimental studies would attempt to assess the link between teacher performance and pupil outcomes in controlled settings. Such settings would be teacher education laboratories and classroom assignments during the student teaching experience. The outcome of such research and evaluation should provide comprehensive information about the operation of a CBTE program, the relationship between numerous variables studied, the relative effectiveness of different teaching strategies applied in various subject areas in school settings, the relative effectiveness of CBTE program training, and the identification of the most effective CBTE program characteristics.

Another paradigm for considering research and evaluation in teacher education is found in the Oregon College of Education CBTE


CHARACTERISTICS OF A TEACHER
CHARACTERISTICS OF THE OCE ELEMENTARY TEACHER EDUCATION PROGRAM
PERFORMANCE OF A TEACHER
PERFORMANCE OF THE PUPILS OF A TEACHER
CHARACTERISTICS OF THE SETTING IN WHICH TEACHING OCCURS

OCE-TR PARADIGM FOR RESEARCH ON TEACHER PREPARATION
(Schalock)

Figure 3

program based on the work of Schalock and his associates (Figure 3).[22] The paradigm calls for a consideration of five major sets of data:

(1) Data on the background and personality characteristics of students preparing to become teachers.

(2) Data on the characteristics of the teacher preparation program.

(3) Data on performances of a teacher.

(4) Data on critical features of the setting in which teaching takes place, including the characteristics of the pupils being taught.

(5) Data on the learning outcomes of pupils being taught.

Schalock concludes that these five sets of data permit an essentially endless array of questions to be asked in relation to the teacher preparation program at the Oregon College of Education and the effectiveness of teachers graduated from that program. Each data set contains within it measures of a number of separate variables. Each variable within each data set contains a number of separate but related measures. Various kinds of research and evaluation questions can be asked by manipulating and using variations of the data sets described in the paradigm.

The two paradigms produced by The University of Toledo and the Oregon College of Education illustrate needed research and evaluation concerns in teacher education. The efforts at both of these institutions will be interesting to monitor. To summarize, it is not going to be simple or easy to conduct any teacher effectiveness studies, whether they involve research and/or evaluation. The efforts needed require considerable cost in time and money, but there should be no question of moving ahead without delay in this critical area. No less will suffice in terms of the present weakness of theory and research on which teacher education programs are based — a crisis complicated by the increasing concern of the public for accountability in teacher education. Because program and product research, evaluation and validation must occur and because considerable chances for such efforts lie in the real world of CBTE and related programs of teacher education, teacher educators, researchers and evaluators must join together and, in fact, become single-minded about the task. Heretofore, teacher effectiveness studies have been principally relegated to relatively few individual researchers, groups of researchers, and

22. H. Del Schalock, et al. CLOSING THE KNOWLEDGE GAP: CBTE PROGRAMS AS A FOCUS AND CONTEXT RESEARCH IN EDUCATION. Albany, N.Y.: Multi-State Consortium on Performance-Based Teacher Education, March 1975. p. 31.

R and D organizations.[23] However, the time has come to meet the challenge that Medley and the Soars' indicate (paraphrasing the inimitable "Pogo"), "We can hear the teacher educator declare: we have met the researcher, and he is us!"[24] With the acceptance of this conclusion, there is nothing left to do but for all who call themselves teacher educators to get on with the research/evaluation tasks before them.

THE STATE PLANNING PROJECT FOR RESEARCH AND EVALUATION IN TEACHER EDUCATION

The Sponsors of the Planning Effort

The research and evaluation planning discussed in this monograph results from two separate efforts, one national and the other statewide, which have come together in the State of Ohio. These are the national activities of the National Commission for Performance-Based Education (NCPBE) and the extensive work in Ohio to establish new teacher education standards by the State of Ohio Department of Education (SODE).

The National Commission on Performance-Based Education, based at the Educational Testing Service, Princeton, New Jersey, was established to create a national research and development program to study teaching effectiveness. It was organized to bring together teachers' organizations, researchers, superintendents, teacher educators, public officials, and concerned citizens to form a national effort to create the knowledge and techniques required to make education for teaching competence a substantial reform in the education and training of teachers. The Commission's goals have been to determine the characteristics of effective teaching, to use this knowledge to create experimental training programs for experienced teachers, and to develop further preservice teacher education and inservice programs.

The Commission is directed by Dr. Frederick J. McDonald. His work in organizing, directing and conducting Phase II of the California Beginning Teacher Evaluation Study, under the auspices of

---

23. Rosenshine indicates that about a dozen or so of such persons or groups are involved. See Barak Rosenshine, "Recent Research on Teaching Behaviors and Student Achievement," JOURNAL OF TEACHER EDUCATION, 27 (Spring 1976): 64.

24. Donald Medley, Robert S. Soar, and Ruth Soar, *op. cit.*, p. 11

the California Commission for Teacher Preparation and Licensing, is well known.[25]

On June 12 and 13, 1975, the Commission convened a meeting in Washington, D.C. attended by representatives from seven states (New York, Florida, New Jersey, Michigan, Ohio, Georgia, California) to create an interstate confederation whose joint efforts would hopefully represent a national research and development program on teaching effectiveness. The principal effort of this meeting was the planning of separate state proposals for the research, evaluation and development efforts in each state which would ultimately be part of a national planning effort and proposal to be developed by the National Commission. Each of the states within the loose confederation were developing new systems for teacher education and/or certification that would result in the improvement of teacher competence. The invited states were experimenting with solutions to the teacher effectiveness problem, and each state's approach was conceived as a component in a total experiment concerning educational change.

The representatives at the meeting from Ohio were Dr. George E. Dickson, Dean, College of Education, The University of Toledo; Dr. William Wiersma, Jr., Director, Center for Educational Research and Services, The University of Toledo; Dr. Jerry Hopfengartner, the State of Ohio Department of Education; Dr. Edward Jirik, the Ohio Education Association, and Mr. Dal Lawrence, president of the Toledo Federation of Teachers. The Ohio delegation developed a planning proposal at the meeting which was ultimately accepted and funded by the State of Ohio Department of Education and the Commission on Performance-Based Education.

The Ohio proposal had two major thrusts:

(1) To conduct planning on a statewide basis for the research, evaluation, and development projects necessary to implement adequately the new **Standards for Colleges or Universities Preparing Teachers,** and

(2) to plan the long-range evaluation and supportive research for The University of Toledo competency-based teacher education program.

The planning effort in Ohio would provide (1) a statewide teacher education research and evaluation thrust and (2) an initial description of the activities and priorities associated with the research and

25. **"Research on Teacher Effects,"** *op. cit.*

development necessary to implement the new state standards in teacher education. Such concerns also involved continued research and evaluation in the area of teacher effectiveness after the state standards were implemented. Since the research and evaluation efforts then ongoing at The University of Toledo dovetailed with the need to explore and plan similar efforts for the new state standards, the project was organized to produce two products for external dissemination:

(1) A state plan for teacher education research and evaluation.

(2) A detailed description of the anticipated continued research and evaluation to be conducted at The University of Toledo.

The state plan would be useful to all teacher education institutions in Ohio in identifying research and evaluation inadequacies, needs, possibilities, priorities, and the concentrated, coordinated effort necessary to meet needs and eliminate inadequacies. The University of Toledo description of teacher education research and evaluation involving its CBTE program would be helpful and congruent with SODE and NCPBE thrusts, since the University's CBTE program was compatible with the new state standards and a research and evaluation model was available. Focusing on these matters statewide, the project would obviously be useful to the NCPBE in its overall efforts to research and evaluate teacher effectiveness concerns and problems.

On December 9, 1974, the State Board of Education, State of Ohio, adopted a new set of **Standards for Colleges or Universities Preparing Teachers** that represented a major, fundamental effort to reform teacher education. Teacher Education Redesign, as it was commonly called, required each college or university in Ohio, which sought state approval to prepare teachers, to submit to the State Department of Education, not later than June 1, 1976, a detailed plan of the process, procedures, and time schedule that would provide an outline by which the college or university would meet the new standards. Each institution would then have four years, until July 1, 1980, when the new standards became effective, to make the necessary changes in its teacher education program and operations to comply fully with the new regulations. An updated statement of how an institution was meeting its plan was to be filed yearly.

Among many requirements, the new **Standards** demanded:

A complete description of the teacher education curriculum for each field—including, but not limited to, the sequential

> learning needed within the body of knowledge, skills, attitudes, and values, as identified through instructional objectives and syllabus for each course, clinical experience, field-based experience therein, together with the identification and specification of essential prerequisites . . .[26]

The phrase "body of knowledge, skills, attitudes and values" is found on five occasions in the **Standards** with reference to the organization of teacher education, the curriculum of teacher education, and the provision of teacher education student services. The **Standards** make clear that there must be a specified body of knowledge, skills, attitudes and values which will serve as the basis for the development of the teacher education curriculum, the teaching of this curriculum, and the providing of necessary program resources. Also to be included are the criteria (standards for judgment) and procedures that are helpful in selecting and admitting teacher education students who will become effective teachers. The **Standards** call for clearly defined statements of purposes and objectives, appropriate instructional procedures which contribute to the effectiveness of teacher education and students' preparation, carefully planned and supervised clinical (laboratory) and field-based (work in schools) experiences, and physical facilities which make possible the use of extensive media and technology resources. Finally, there must be a well-defined plan of evaluation for the improvement of the teacher education program.

Obviously, such standards require a research and evaluation effort to identify and to determine how well the "knowledge, skills, attitudes and values" to be instilled in teacher education students are being assimilated and demonstrated. Further, there is the assumption that the new state standards will result in considerable change and renewal of teacher education programs along the lines specified in the **Standards.**

The requirements implicit in the new **Standards** definitely fit the objectives of the National Commission for Performance-Based Education and the state planning efforts called for under NCPBE guidelines. Specifically, since evaluation is viewed as an integral part of instruction, planning for evaluation is included in all standards concerned with instruction. More directly, Standards EDb-303-8 (A) and (B) address themselves to evaluation as follows:

---

26. STANDARDS FOR COLLEGES OR UNIVERSITIES PREPARING TEACHERS, (Columbus: Ohio Department of Education, 1975). p. 5.

> Continuous study, development, and improvement of teacher education shall be evidenced and supported by a well-defined plan of evaluation which shall provide for the follow-up of graduates.
>
> Plans which are part of a design for total college or university development shall be formulated for the long-range development of teacher education.[27]

Further, in a second year of research and development grants (Project 419) funded by the SODE for Teacher Education Redesign there was a clear request to conduct empirical and/or other systematic investigative efforts that were designed to explore problems related to the implementation of specific elements of the new **Standards.** Research and evaluation were not extraneous to the new **Standards** or State of Ohio efforts to implement them.

The planning proposal developed by the Ohio delegation attending the NCPBE Washington, D.C., meeting which was further refined through efforts by the Center for Educational Research and Services, College of Education, The University of Toledo, was accepted by the State of Ohio Department of Education and the National Commission for Performance-Based Education. The organizations jointly funded the proposal with the NCPBE contributing one-third and the SODE two-thirds of total costs. The project outlined in the accepted proposal began operation December 1, 1976.

---

27. *Ibid.* p. 9

27

Chapter 2

PLANNING FOR RESEARCH AND EVALUATION IN TEACHER EDUCATION — AN OVERVIEW

Planning for research and evaluation of teacher education in the State of Ohio had two major thrusts. Although they were described in Chapter 1, they are repeated here to give proper emphasis to the procedures developed for the project. The major thrusts were:

1. To conduct planning on a statewide basis for the research, evaluation and development projects necessary to implement adequately the new Standards for Colleges or Universities Preparing Teachers.
2. To plan the long-range evaluation and supportive research for The University of Toledo competency-based teacher education program.

The preceding chapter discussed a nationwide concern for research and evaluation in teacher education and its related subject, teacher effectiveness. This nationwide concern needs translation into individual, local area and statewide research and evaluation efforts in teacher education to produce the results desired. Heretofore, such teacher education research and evaluation efforts have been widely scattered, not part of a planned, coordinated approach that would put local or statewide edeavors into a major effort to address a particular need. Here is the unique emphasis of this project: An attempt to organize teacher education research and evaluation activities as a single thrust rather than continue and encourage the fragmented efforts usually found in disparate projects.

This planning project for research and evaluation in teacher education was funded jointly by the State of Ohio Department of Education (SODE) and the National Commission for Performance-Based Education (NCPBE) located at Princeton, New Jersey. The SODE provided roughly two-thirds of project support and the NCPBE contributed the remaining one-third.

Any planning project requires particular methodology that involves committee meetings, conferences, organization of information from meetings and conferences, and the summarizing and dissemination activities which provide the plan or plans for consideration. This

planning project for research and evaluation in teacher education followed this methodological direction. Personnel were selected and meetings organized for planning purposes for both the local (Toledo) and statewide (Ohio) planning thrusts.

Executive Committee

An eight-member executive committee was formed to conduct the planning. This committee continued the Ohio representation which had been present at the NCPBE meeting in Washington, D.C., and added other individuals who represented key organizations or groups concerned with teacher education. The composition of the executive committee had representatives from the Association of Private Colleges for Teacher Education, the Ohio Education Association, the Ohio Federation of Teachers, the Ohio Teacher Education Certification and Advisory Committee, the State of Ohio Department of Education, and the State University Education Deans. Professors George E. Dickson and William Wiersma, Jr. of The University of Toledo served as project co-directors. The members of the executive committee were:

1. Dr. Chester Addington, representing the Ohio Association of Private Colleges for Teacher Education.
2. Dr. Roger Iddings, representing the State University Education Deans.
3. Dr. Edward Jirik, representing the Ohio Education Association.
4. Mr. Dal Lawrence, representing the Ohio Federation of Teachers as president of the Toledo Federation of Teachers.
5. Ms. Carol Matthews, representing the Ohio Teacher Education Certification Committee.
6. Dr. Patricia Mills, representing the State of Ohio Department of Education and Project 419.
7. Dr. George E. Dickson, Project Co-Director.
8. Dr. William Wiersma, Jr., Project Co-Director.

Dr. Thomas Gibney, a project staff member, attended all executive committee meetings as committee secretary and recorder.

The major work of the executive committee centered on providing the background and agenda for meetings, the conducting of the planning meetings, and the review of meeting results for planning,

organization and dissemination. The executive committee represented the groups most concerned with teacher education research and evaluation planning in Ohio. The executive committee met four times for the purposes stated.

The initial effort of the executive committee was the organizing of meetings for the Local Planning Group associated with The University of Toledo's CBTE program and the larger State Planning Group meeting on a statewide basis. The committee approved information or position papers developed by the project staff for these meetings, developed meeting agendas, identified the persons to attend the local and state planning group meetings, selected the dates and locations of the meetings, and developed a series of questions on two broad topics for the Local Planning Group meeting and on four broad topics for the State Planning Group meeting.

Position Papers

In order to provide individuals some background for their participation in the planning project, a series of similar position papers were written by the project staff and circulated to relevant groups at appropriate times. The position papers were identical for about the first one-half of their content. Then the remainder of each paper focused on a specific forthcoming event and the group being addressed. There were four position papers that appeared in the following order for the events and groups addressed:

1. The first meeting of the members of the Executive Committee.
2. Participants in the Local Planning Group meeting on February 14 for the planning meeting on research and evaluation in teacher education at The University of Toledo.
3. Participants in the State Planning Group for the state planning meeting of March 9-10.
4. Ohio Foundations expressing an interest in support of education—this paper was circulated prior to the state planning meeting of March 9-10. The position paper was accompanied by a letter of invitation for a foundation representative to participate in the meeting.

The position papers appear in the Appendix. The common section of each paper will not be repeated. Instead, the first paper will be presented in its entirety with the common section blocked in. The second, third and fourth papers will have a heading inserted in lieu

of the common section. The heading indicates the title of the paper and the group addressed, followed by the unique content of the position paper.

Local Planning Group Meeting.

The Local Planning Group met at the Quality Inn, Toledo, Ohio on February 14, 1977. The one-day conference was attended by the members of the executive committee; nine staff members from The University of Toledo who were participating in a special teacher education research and evaluation project under the auspices of the second phase of Project 419; ten representatives of The University of Toledo Teacher Education Policy and Advisory Committee (TEPAC),[28] and other selected observers from the College of Education, of The University of Toledo and selected school systems. The Local Planning Group consisted of 31 persons. These participants, for the most part, were individuals actively involved in teacher education and familiar with past CBTE developmental efforts in the College of Education. Details of the meeting and its results are reported in Chapter 3.

State Planning Group Meeting

The State Planning Group meeting was held in Columbus, Ohio at the Hospitality Inn, March 9-10, 1977. The meeting was invitational with participants representing the following institutions, agencies, or groups:

1. The members of the planning project executive committee (8 persons).
2. One representative from each College of Education in the state supported universities not represented on the executive committee. (Eleven state universities were represented as one state university declined to participate because of other commitments) (10 persons).

---

28. TEPAC is a committee associated with the College of Education at The University of Toledo. Because The University of Toledo teacher educaton program is heavily field-based, prepares teachers for IGE schools, and involves extensive participation of the schools, TEPAC has the following membership: (1) 22 members from the public and private schools, involving a teacher and administrator from each of the 11 systems working with the University in teacher education, (2) two lay members from the community, (3) two undergraduate students, (4) one member of the Metropolitan Toledo Multiunit-School League, and (5) 19 University faculty consisting of instructional team leaders, department chairmen, and high level College administrators responsible for administering the undergraduate teacher education program.

3. One representative from a selected school or school system cooperating with each of the state-supported universities' teacher education programs (11 persons).

4. One representative from each of six private colleges preparing teachers. (A seventh representative of a private college was represented on the executive committee) (6 persons).

5. One representative from a selected school or school system participating with each of the private colleges' teacher education program (7 persons were invited and 4 attended the meeting).

6. Representatives of the State of Ohio Department of Education—two Assistant Superintendents of Public Instruction, the Director of the Division of Teacher Education and Certification, and the Supervisor of Teacher Education, (4 persons).

7. A representative from the Martha Holden Jennings Foundation (1 person).

Including the members of the project staff, the State Planning Group meeting involved 44 persons. These individuals either had some connection with teacher education or were teacher education leaders in the State of Ohio. The representatives from the state and private universities, for the most part, were the deans, associate or assistant deans, or directors of the university units responsible for teacher education. The representatives from school systems were superintendents, assistant superintendents, and teachers.

The State Planning Group meeting opened with a relevant keynote address on "Building a Professional Culture for Teaching" by Dr. Robert Howsam, Dean of the College of Education at the University of Houston, Houston, Texas. This address served a very useful purpose in providing a broader context (broader than that presented in the position papers) for research and evaluation in teacher education. The address dealt with a professional culture for teaching. It makes the case for the importance, indeed the necessity, of such a culture. Because of its timely relevance to the planning, the address is presented at this point in its entirety.

BUILDING A PROFESSIONAL CULTURE FOR TEACHING

by Robert Howsam

"Perhaps it would be wise for me to alert you that what I propose to present will be unbiased; unbiased in the same way as would be expected in the Unbiased History of the Civil War from the Southern Point of View.

My bias is in the direction of a strong persuasion that the greatest need in education at the present time is for strong efforts to professionalize teaching.

History of Teacher Education: A Personal Perspective

For openers, I should like the privilege of highlighting the problems which we confront here today by reference to some landmark events in my own professional career. Hopefully they will serve the purpose of providing perspective if nothing more.

Forty-two years ago I was enrolled in a Canadian normal school where in one year, following graduation from high school, I learned what I could about being a teacher. Subject matter to be taught, the undergrading disciplines of teaching, (then mostly history, philosophy and psychology), knowledge of the school, curriculum, methods of teaching (strongly Herbartian) and practical experiences through observation and student teaching crowded that busy if not too rigorous year.

The following September (1936) with a far more serious shortage of positions than now, saw me luckily established as a teacher in a one-room rural school on the Canadian prairies. I was totally responsible for 32 children, ages six to sixteen, in grades one through ten. In addition I carried in the coal, stoked the big stove in the corner, carried out the ashes, swept and tidied, and did all of the other things attendant upon keeping the school. For this I received the magnificent sum of $600 plus the use of a teacherage on the school grounds for my domicile. Somehow and strangely with the help of a supportive group of farm families, the children learned. So did I.

After two years of this challenging and exciting experience I won my way into a town school assignment where I was teacher of grades seven and eight. Two years of this and I "made it" into the city to be teaching vice-principal in a large 1-8 school.

Fortune smiled once again in 1951 when, after four years in the Royal Canadian Air Force and four years in college, I was made the first principal of a newly established university demonstration school (Brunskill School at the University of Saskatchewan). There we were supposed to model the best in educational and teaching practice so that students of teaching and teaching practitioners could learn modern practices at first hand.

During five professionally satisfying years in that situation we did our best to know and to do what was then thought to be best, drawing heavily on practices within the United States as reported in the literature. Our reputation for quality far exceeded our confidence that we really knew how, however.

In 1956, having at long last completed a doctorate in Educational Administration at Berkeley (the bachelors and masters had been achieved in 1948 and 1950 at Saskatchewan) our family left Canada and settled in Berkeley where I spent four years on the faculty in Educational Administration. A valuable opportunity developed during that period and I was pleased to take advantage of it. The California Teachers Association and the California School Boards Association—responding to a strong demand for evaluation of teachers—wanted to conduct a study to discover what was then known (1959) about teacher effectiveness. With the promised help of colleagues at Berkeley, I undertook direction of the study. By 1960 we were able to report through a brochure called "Who's a Good Teacher" (1960) that there was virtually no validated knowledge upon which evaluation of teachers could be based.

My colleagues and I were greatly stimulated and challenged by the need for knowledge about teacher effectiveness so we pushed the project into a new emphasis. A second publication resulted, its title being **New Design for Research on Teacher Competence** (1960). In essence, it called for observational study of the act of teaching within the context of classes at work. Cameras mounted in classrooms intermittently would record what went on over protracted periods of time. The resulting record would then be used to describe and analyze teaching and learner behaviors. Out of this would come hypotheses and research projects which would build the knowledge base about teaching. In retrospect we can only mourn the federal grant custodians' decision that the project was not fundable. What we had proposed still needs doing.

My next six years were spent at the University of Rochester where I concentrated on graduate studies and school administration.

.L34

In 1966, however, came the opportunity to join the emerging and promising University of Houston as Dean of Education. Hard on the heels of this assumption of duties came the opportunity to build a new home for the College. This provided the impetus to reconceptualize teacher education in future terms and to build for and fashion that future. Many of you know the resulting building which was occupied in 1971, and the programs which have been developed and implanted in the decade since 1967. Some will know of our thrusts in Competency-Based Teacher Education. Some will and some will not recognize that CBTE was to us but the means of developing the knowledge base for teaching and teacher education. Probably all of you know of our great debt to the Models Project through which at long last the federal government in 1968-9 assaulted the question of adequate teacher preparation programs. Out of those ten models came the Competency-Based Teacher Education program and a further impetus to study teaching with a view to improving both preparation and practice. Tragically the Feds once again failed to stay with their commitments; the plan to implement the models was allowed to die and that too still needs doing.

For a few years in the sixties and seventies the federal government did offer assistance to teacher education through Triple-T and other projects. Our college managed to get small but helpful shares of these funds and they contributed greatly to our efforts. Teacher Corps, the most enduring of the teacher education programs, also came to us in a number of cycles and contributed greatly. None of these grants permitted research on the developments which they fostered. This strange but pervasive attitude continues to the moment in the struggle over the budget of the National Institute of Education.

One more event is needed to round out this newsreel of events in teacher education as experienced by one person over a 40-year professional lifespan. In 1974 the Board of Directors of the American Association of Colleges for Teacher Education decided, as a Bicentennial activity, to conduct a study of teacher education which hopefully might have an impact on the teaching profession comparable to that which the Flexner Report (1910) had on the medical profession. I was privileged to serve as chairperson of that study commission and to have as colleagues Dean Corrigan of Vermont, Dean Denemark of Kentucky and, later, Dr. Robert Nash of Vermont. The 1976 report, entitled **Education for a Profession,** lays out in broad terms what the situation within the teaching profession and teacher education is at this time.

As of last week, Dr. David L. Clark, as the 1977 Hunt Lecturer at the annual meeting of A.A.C.T.E., presented his paper entitled **The Real World of the Teacher Educator: A Look to the Near Future.** The paper adds significantly to the challenges presented in the Bicentennial Commission report. Together the two works examine most of the elements in the complex system which the American society has established for providing educational opportunity for the people of this land. The picture is not pretty. The tasks are not easy. The challenges are great. And they have great significance for what you in Ohio are proposing to do. The 1978 Hunt Lecture will address itself to research in teacher education and should further enlighten us on where we are and what we need to do.

Unless you want to know what I did on the weekend and on Monday at work you now are up-to-date on the personal history of one person whose life has been spent pursuing various aspects of the teaching profession.

A Balance Sheet

You will note at each milestone the negative discrepancies which have been observed. The normal school experience did little in preparation for the challenges to be faced in rural, town and city schools. A demonstration school found all too little to demonstrate. A review of the literature was only able to report that there was no known valid and reliable approach to teacher evaluation. A proposal to try to do something about our knowledge base for teaching in 1960 went unsupported. A major federal government study in 1968-9 had tremendous potential but it was never test-implemented. The federal programs of the sixties and seventies were skimpy, mercurial and transient with resulting frustrations and failure to give optimal payoff. And we struggle in 1977 to keep some members of Congress from cutting the NIE budget.

As can be surmised, the 1976 Bicentennial Commission was able to report only that the existing discrepancies between the need for professionally capable teachers and what the profession can deliver continues to be great indeed.

Summary of the Findings of the Bicentennial Commission

Humorously, but seriously, it was indicated at the beginning that this writer is openly biased in favor of the professionalization of teaching. Perhaps it would be as accurate to state that the Bi-

centennial Commission had a similar bias. It sought a "Flexner effect" in the direction of maturity as a profession.

Since a number of the members of the audience (and readers) will already be familiar with **Education for a Profession** it should suffice to remind ourselves of its principal findings.

1. Teaching by its nature should qualify as a profession.

2. In reality, however, it falls far short of meeting the characteristics of mature professions. Instead it quite closely approximates the definitional characteristics of a semi-profession with all of the limitations which that implies.

3. The most critical difference between teaching as a profession and the characteristics of mature professions is the relative absence of "professional culture;" a body of knowledge and a repertoire of behaviors and skills developed over the years, possessed by practitioners, and passed on to inductees during preparation. **Clearly, this lack of a professional culture is of critical importance in any consideration of Research and Evaluation in teaching and education whether in Ohio or elsewhere. Research is needed to build the base for a profession of teaching; to a large extent, effective evaluation must await the development and transmission of such a culture.**

The absence of a professional culture can be demonstrated through analysis of practice within schools, by interview with teachers, by examination of teacher education which is charged with developing and transmitting the professional culture, and by study of our own literature. Lortie's 1976 book entitled **Schoolteachers** is a report of a sociological study. His teacher interviewees reported little help from or faith in teacher education. It clearly revealed that teachers draw heavily on their own experiences, their societal and cultural backgrounds, and their own schooldays experiences and models as they struggle to develop survival strategies. In consequence, they dialogue little with other teachers and eschew help from supervisors or principals as best they can. They prefer to be left alone. Theirs is a tragic state when one considers that the society has had teacher preparation programs and institutions since the 1830's.

4. Unlike the established professions, teaching has never had the critical mass of resources needed for the development of a professional culture.

   a. Money, time and facilities for research and evaluation have never been present in significant quantity. As a result there are among educators few with research background and orientation.

   b. The education of teachers can only be viewed as tragically deprived—the Cinderella of higher education at the preservice level and generally farcical at the inservice and continuing level. Preservice teacher education draws the lowest level of dollar support per credit hour of all university programs (national average). Additionally, it is dramatically lower in the "Life Space" (number of credit hours) available for programs. The national average of 18 semester hours of professional education for secondary teachers (12 hours plus six of student teaching) and the not greatly larger amount for elementary teachers compares with the roughly 75 hours controlled by business or engineering, the pre-law plus two years of law, the multiple years of medicine, etc.

      There is a simple concept of "critical mass" which indicates that in any effort to produce a change effect the inputs have to be such as to affect the change. Less than a critical mass will be dissipated and the system will return to its original equilibrium. Those of us who would attempt change or would do research or evaluation need to keep in mind that under existing conditions much of what we have to work with foredooms us to failure in the absence of critical mass.

      The Bicentennial Commission addresses itself to the "Life Space" question with recommendations for: (a) an additional year of preparation (5th year) plus a required one-year internship and (b) expenditure on inservice and continuing education of teachers of not less than 10 percent of the budgets of school districts (arrived at progressively.)

      In my own view, positive results will appear in schools only when critical mass inputs to research and preparation are achieved. That is not to say that we cannot

start smaller and work into a proper level. It does say, however, that the critical mass principle will prevail.

5. The governance of education and of the teaching profession in our society militates against effectiveness. Collegial models are less suited to institutions which employ professionals. The school systems of America tend to be based on bureaucratic and political models. Much more research and innovation need to be conducted in this element of the educational system.

Perhaps the most serious flaw in the governance structures of education is that of teacher education on the university campus. Of all the professions it is most dominated and controlled by the academic community. Teacher education always is in direct conflict with the disciplines over available life space. Teaching alone among the professions has to study academic disciplines for their own sake as teaching fields; the other professions study the disciplines for their relevance and utility to their professional culture. With approximately 40 percent of the degree program required in general-liberal studies and another 40 percent in one or two subjects as teaching fields, professional education ends up with what it can get of what is left. Nor does it have either the power or influence with which to change conditions and improve its lot. The academic community has the votes in university governing bodies and it uses them "softly but with a big stick." Foolishly, in my view, teacher education has fostered the ideas of "teacher education as an all-university function." Collaboration among equals brings mutual advantage; collaboration among unequals brings exploitation, control, dominance and usually disdain.

For an incisive exposure of the dominance of teacher education, I suggest you refer to chapter three of the 1976 N.S.S.E. Yearbook on **Teacher Education,** written by Clark and Marker.

A serious additional problem in governance is the wide gulf that exists between the practicing teacher professionals and those who serve in the preparation and development arm of the profession on the college campuses. It is dysfunctional to have a professional family divided; those of us in higher education should concentrate on our own reunion with our

field-based professional colleagues. From a practical point of view we should realize that the only source of power available to us in improving our lot is the organized teaching profession.

The above by no means reveals all of the issues which face us but it may be enough to illustrate the need for very careful thought and analysis as we move towards improvement of education through research in teacher effectiveness and in teacher education. We are dealing with a complex system with many interrelated parts. Tinkering is not likely to help. The system is so massive in scale and the influence so pervasive that we must attend to both major and minor elements. Otherwise critical mass will not be achieved and contributions may be lost.

A Systems Model

The material which follows presents a model which the author has developed as a means of analyzing the educational system and its processes. It is presented through a diagram and a parsimonious series of notes on each of the eight numbered positions on the model. It has been found useful by students and professors in examining all forms of social systems from the individual to the complex societal structures. The model is presented in the figure on the following page.

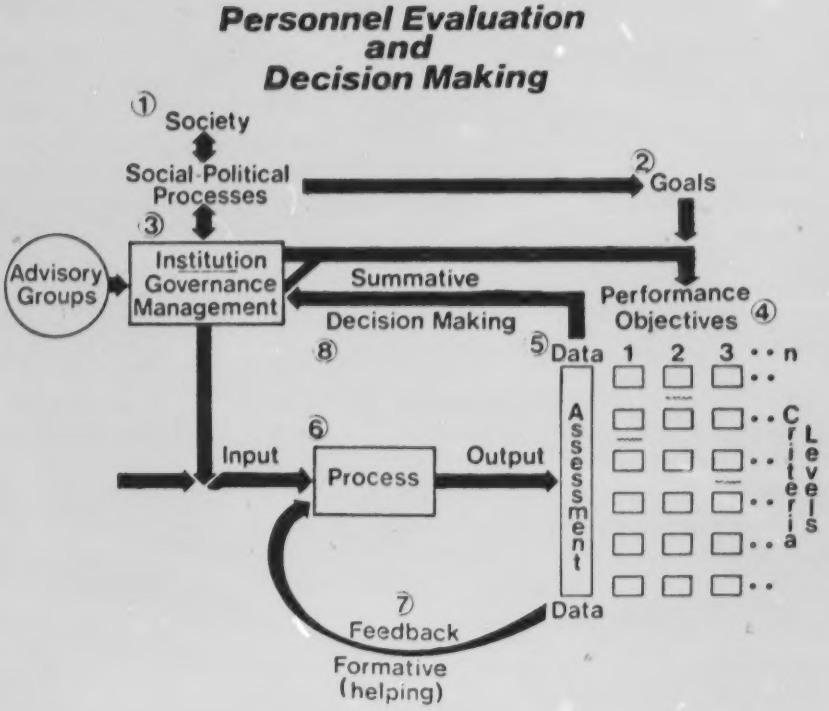
Some Considerations Based on the Model as Applied to the Educational System*

Position 1: Societies involved in rapid change become concerned with the impact upon traditional values of emergent values. There is a resulting confusion and conflict.

Central to all societies is the basic function of enculturation. This process tends to embrace traditional values and behaviors and to serve as a preservative and conservative influence. The fact that education has been perceived widely as something that happens to children in their immature years contributes to the emphasis on the traditional even in a society which is quite open in adult life styles.

Societies tend to preserve their basic life styles and institutions as long as they can. The school in our society is still conceived in much the same form as it was a century or two ago. So is the teach-

*Positions 2 and 8 are self-explanatory.



ing profession. It is apparent that within this content, neither a modern and relevant school nor a strong teaching profession will appeal to large segments of the population. There is need for serious study of this problem if progress in teacher competence and relevance is to be achieved.

Position 3: For every function, complex societies have elaborate systems of organizations and institutions. The list for education could be elaborated endlessly. Some are more critical than others, however.

In the delivery of any service to society the two most critical institutions are those of (a) the delivery system workplace which in

this instance is the schools (hospitals and clinics for medicine; courts for law) and (b) the organized group which delivers services within the workplace. For optimum results the two systems have to be appropriate for and compatible with the functions and with each other.

It is the view of the observer that the school systems of this society are among the most elaborate and well supported in the world. It is further hypothesized, however, that they are not well designed for other purposes. They are unduly bureaucratic and political. Most seriously they are based upon inadequate assumptions about who their workers are (primarily children) and what the nature of teaching is (professional; not craft). The whole management and governance system is based upon delegated authority rather than the authority deriving from professional membership and expertise.

The above should not be forgotten as we research and innovate. The observed behavior of both teachers and learners can be understood better if their perceived status and role are understood. Changing the behavior will require a gradual retooling of the management and governance system.

Central in the retooling is the professionalization of teaching both in culture, image, governance and status.

Position 4: Each institution which society establishes or permits to be established receives a charge from the political and social structure; the explicitness of the charge varies but it tends to be vague so long as there is general societal satisfaction with results. (Accountability emphases and dissatisfaction usually are closely related no matter how logical the accountability movement). In its vague state the charge(s) provides little by way of definitive guides to action. Thus, the institution has the responsibility of translating its charge into specific objectives being stated in behavioral (output) terms and having criteria by which performance may be assessed. Additionally there often is a criterion level for each objective; these represent minimal levels of performance or standards.

The objectives, criteria, and criterion levels as they are established for teacher education become the professional culture which is transmitted to inductees during preparation. Cognitive, behavioral and affective objectives are included. Clearly those who engage in

research and development in teaching have the task of deciding upon objectives for use in preparation programs.

Position 5: Performance or outputs in terms of the criteria or standards need to be evaluated. An assessment system is designed to gather data with the instrumentation specifically designed for the purpose and covering all assessable objectives. A wide array of devices may be used depending on the nature of the output products. Skill in evaluation is essential to research good practice. Poor evaluation tends to cause distortion of objectives as attempts are made to demonstrate success.

Position 6: Next in logical order the operational processes are designed and put into place. This is portrayed as the traditional input → process → output model. Inputs represent resources, people, talents, etc. They come both from the institution (personnel; facilities; supplies; curricula; organizational climate) and from other societal, institutional and individual sources. Included are such items as parental support, pupil backgrounds, influences of mass media, influence group pressures, etc. These often are referred to as contextural variables.

Process is the actual operations such as teaching, management, supervision.

Output is the exhibited behavior of the target population with primary attention to the intended (objectives) outcomes but without ignoring relevant unintended behaviors.

Position 7: Once output begins, the assessment system begins to work and to generate data on how well the process is working. The use of the data may be the most important consideration in the whole operation. Positions 7 and 8 show the alternative and often conflicting uses. One is designed for feedback of data back to those who plan and implement processes. Because it is designed to be helpful in improving the processes it is termed formative. Another way to improve a system, however, is to change it administratively by decisions about employment or retention, rewards allocation, resource allocation, etc. Such decisions also are based on data—the same data in many cases. This use of data is termed summative.

All evaluation is threatening. Summative use of data tends to be highly threatening while formative use of data deliberately strives to keep the threat level as low as possible. The evidence is that low

levels of anxiety often lead to efforts to improve. High levels on the other hand tend to cause the individual to be less effective. Coping with the threat becomes more important than changing. This principle applies equally to both teachers and pupils.

There is inevitable conflict between the formative and the summative uses of data in evaluation processes. But they both are necessary. The test of administrative, supervisory and teaching skill lies in the capacity to emphasize the formative and deemphasize the summative, to keep open the human capacity to learn and to change. Growing and changing is the business of education. Its processes must be consistent with its purposes.

The present emphases on standards and accountability derive from honest concerns over the effectiveness of schools. Properly used they can lead us to vast improvements. Improperly used they will result in goal reduction (dropping attention to broader goals and emphasizing narrower skills-type objectives). They also will result in even greater bureaucratization of the schools.

Modern techniques of management such as those implied in the above model have great power for goal establishment and attainment. Improperly used they have equal power to damage the sensitive human processes upon which all good schools depend. Research shows that a press for results can bring short-term results but longer-term losses. We should keep this in mind as we move towards standards and evaluation whether in schools or in teacher education.

The Model and Research/Evaluation

The Eight Position Model is a crude map of the terrain to be explored through our research and evaluation efforts. A few examples will illustrate its global nature.

1. Presage variables — Inputs, teacher characteristics
   Process variables — Process, teacher behavior
   Product variables — Outputs, pupil gains
   Context variables — Variables which influence outcomes but are not within the capacity of the school system or teacher to control

2. Cognitive objectives — Knowledge
   Behavioral objectives — Behaviors, skills
   Affective objectives — Values, attitudes
   Consequence objectives — Outcomes

3. Learner as object of study where teacher represents output. Teacher as object of study where teacher education represents input.
4. Societal conditions which affect the effectiveness of schools.
5. Governance and management systems including collegial, bureaucratic and political.
6. Effectiveness of formative and summative emphases in the administrative/supervisory system, in evaluation, and in particular in teacher education.
7. Critical mass inputs needed to affect a desired change in behavior or outputs.
8. Effective instructional strategies for teacher education including clinical laboratory, classroom, field-based protocols, simulations, micro-teaching, structure observation, etc.

Conclusion

This paper started with the assertion of a bias. The bias was in favor of the professionalization of teaching and of the redesign of the management assumptions and systems of schools to be consistent with the nature of the school as a workplace staffed by professionals.

Teacher education is the long-term key to attainment of this objective.

Hopefully, you in Ohio will take your charge and your opportunity seriously. Hopefully, too, you will succeed in some critical mass efforts which escape the constraints of life space and resources as they presently operate. Failure to do so will condemn you to continuation of the dreary findings of past research."

* * *

The keynote address by Dr. Howsam provided a thoughtful and constructive resource background for the State Planning Group meeting sessions which followed.

The second speech at the state meeting was a presentation by Dr. Patricia Mills, Assistant Dean, College of Education, Bowling Green State University, who was also serving as the Director of Project 419, Phase II. Dr. Mills provided a complete review of the

potential for research and evaluation in Teacher Education Redesign (Project 419).

The principal working sessions of the planning meeting were organized into five groups concentrating on four basic topics:

1. Teacher education research and evaluation in Ohio and its congruence with national teacher education research and evaluation.
2. Teacher education and evaluation implied in the new State Standards, and research needed to validate them. (Two groups considered this topic.)
3. Teacher education research and evaluation desired by separate sectors of the professional education community.
4. The coordinating and funding of teacher education research and evaluation efforts in Ohio.

Each of these basic topics had a list of pre-developed questions[29] which each group considered over a two-day time span. The meeting closed with group reports, and a conference resume and projection by Dr. G. Robert Bowers, Assistant Superintendent, State of Ohio Department of Education.

The anticipated results of the State Planning Group meeting were the identification, classification, organization, and prioritization of needed and desirable research and evaluation concerns in teacher education for the State of Ohio. The project staff then assembled the information collected from the State Planning Group meeting in Columbus and organized a draft of proceedings of the meeting. These drafts were circulated to the persons attending the State Planning Group meeting for their comments or suggestions. From this draft and the comments received, as well as other materials, the project staff then organized this project report which was circulated to the members of the executive committee for their review and comment.

Concluding Remarks

This chapter has concentrated on the background provided for participants of the planning meetings, especially the State Planning meeting. Some readers may find the extent of the review and the space devoted to providing a planning context somewhat unusual. (At this point in the report there has been no discussion of planning

29. The topics and questions appear in the Appendix.

46

results.) The reason for such elaboration of background is that without it readers are not well-prepared for the results of the planned meetings which follow. Readers, like participants, come from various sectors of the education profession; some are more knowledgeable about research and evaluation than others. It is important that all start on some common base, and that some idea is available as to "where we were coming from and where we are going." Without that there could be much confusion in understanding the planning which resulted.

The remainder of this report focuses on the results of the planning. There are two major sections, the results of planning for the local context at The University of Toledo and the results of the state level planning. In both cases a cooperative approach is emphasized.

Chapter 3

RESULTS OF PLANNING FOR RESEARCH AND EVALUATION ASSOCIATED WITH THE CBTE PROGRAM OF THE UNIVERSITY OF TOLEDO

Evaluation and supportive research activities for The University of Toledo competency-based teacher education (CBTE) program must be implemented in local settings. The CBTE program at The University of Toledo is heavily field-based and its evaluation involves the public and private sectors of the education profession. By the same token, the State of Ohio **Standards for Colleges or Universities Preparing Teachers** also require cooperative planning of research and development activities between the colleges of education, the school systems, the State of Ohio Department of Education, and the related educational associations. It is within this background that the long-range evaluation for The University of Toledo CBTE program was developed.

Evaluation in CBTE whether dealing with preservice or inservice education is limited. Persistent criticism of CBTE from the National Education Association, the American Federation of Teachers, and others consistently points out the need for a research base prior to program development and the need for an evaluation component when programs are implemented. Some conceptualization of assessment and research procedures has been done.[30] However, any long-term project with a research base will require the development of considerable methodology as the project is conducted as well as the production of evaluation results. The planning for research and evaluation of The University of Toledo CBTE program can provide a basic conceptualization and process for CBTE evaluation that is transferable to other, somewhat similar preservice teacher education operations.

Characteristics and Assumptions Underlying the Toledo CBTE Program

The CBTE design produced at The University of Toledo was an attempt to bring the University, the public and parochial schools,

30. See for example:
Theodore E. Andrews (ed.), *op. cit.*
Gary D. Borich, *op. cit.*
George E. Dickson (ed.), *op. cit.*
H. Del Schalock, et al., *op. cit.*
Donald Medley, Robert S. and Ruth Soar, *op. cit.*

and the community into various coalitions that function cooperatively in a preservice and inservice teacher education program. It was a comprehensive education, reform-renewal strategy for a region and its educational institutions. It involved a systems approach and modeling in developing, organizing, and operationalizing a considerable educational change effort. The basic organizing elements in the Toledo CBTE system were the development of individually guided education (IGE), competency-based education (CBE), and competency-based teacher education (CBTE).[31] These elements were effectively linked to create a climate for and support of a strategy for massive educational change.

The developers of the Toledo CBTE program began with the fundamental assumption that they were to design a teacher education curriculum that would prepare teachers and the pupils they teach for a world of rapid change. Such a design would require a comprehensive educational process for all personnel, (students, college teachers, inservice teachers and administrators) in all types of educational institutions involved with teacher preparation. Existing programs of teacher education were not considered as models or limitations. It was assumed that the creation of a new teacher education model would result in corresponding changes and innovations in the school settings where the new teachers prepared in the model would be placed and the model applied. Consequently, the concept of teacher preparation for a self-contained classroom was abandoned and there was incorporated the concept of Individually Guided Education with a multiunit school and team teaching approach developed by the Wisconsin Research and Development Center for Cognitive Learning.

Other basic assumptions inherent in The University of Toledo CBTE program were:

1. There are five conditions of life in education and society (called contexts) which probably represent the more improtant sources of change in teacher education today and which are vital to the educational process. These are: Instructional Organization (including content and methodology), Educational Technology, Contemporary Learning-Teaching Process, Societal Factors, and Research.

---

31. The complete discussion of the system may be found in: George E. Dickson and Richard W. Saxe, PARTNERS FOR EDUCATIONAL REFORM AND RENEWAL, Berkeley: McCutchan Publishing Corp., 1973.

2. All personnel in the educational system (colleges and schools) must be given appropriate and adequate training and retraining to the highest degree possible or there will be limited change in educational programs.

3. Teacher preparation is continuous with preservice and inservice education on a continuum with the time required for any person to complete a training program depending fundamentally on satisfying performance criteria.

4. Work and experience in schools, the real world of teaching, is an essential component of every portion of a teacher education program.

5. A good teacher education program demonstrates an awareness of the cultural differences existing in society and utilizes a variety of psychological theories and knowledge including behavior modification and child development.

6. Teachers must learn how to assess and modify their own teaching behavior and style.

7. Teacher education must incorporate the characteristics of individualization and personalization. Individualization makes possible student learning activities independent of other learners. Personalization enables students to state and know clearly what they desire to do as well as what they can do, and they are then held accountable for demonstrating the competencies they have helped to define and have contracted to achieve.

8. The teacher preparation program must be self-renewing and constantly attempting to improve itself through the use of effective evaluation procedures and feedback. Teacher education under these conditions is always changing and never static.

The orientation of the Toledo CBTE program was definitely toward the preparation of the teacher as the **decision-maker** in the instructional setting. The linking of CBTE with IGE fostered this type of decision-making professionalism, possibly more so than traditional forms of education.

Research and Evaluation of The University of Toledo CBTE Program

The University of Toledo CBTE program, from the creation of the original design in 1968 to present day operation, has been con-

cerned and active in research-evaluation designs and programs. The original program design contained a comprehensive evaluation component titled the **Context, Input, Process and Product Evaluation** (CIPP) system developed by Daniel Stufflebeam and Robert Hammond.[32] Due to a lack of funding, the full development and operation of this model evaluation system was never implemented. A computer-based management information system has been developed and operated for portions of the program that have an assessment and revision component.[33] This system provides data management and feedback on individual student performance by behavioral objectives (as these are found in instructional modules), overall or group student performance by objective for a particular pre- or post-test, and a summation of student performance information by objectives within modules. These data are useful for determining individual student performance on CBTE objectives for corrective feedback purposes and for program (module) analysis and revision. Other evaluation efforts have involved several formative evaluation procedures in relation to the CBTE program,[34] the use of a general evaluation model developed by the Consortium of Competency-Based Education Centers,[35] faculty evaluation efforts through special ad hoc committees,[36] and the use of external evaluators who have visited the University and provided written reports of their findings.[37]

A very recent evaluation effort involving the CBTE program was the use of an extensive evaluation instrument, the Guide for Institutional Learning (GIL), developed by the International Management Training for Educational Change (IMTEC) organization

---

32. George E. Dickson and others. EDUCATIONAL SPECIFICATIONS FOR A COMPREHENSIVE ELEMENTARY TEACHER EDUCATION PROGRAM, FINAL REPORT, VOLUME I. Washington, D.C.: Government Printing Office, 1969. pp. 209-235.

33. Castelle G. Gentry and Stephen Jurs. SECOND STAGE TEACHER CENTER AND CBTE DEVELOPMENT AND IMPLEMENTATION, PART IV, MANAGEMENT INFORMATION SYSTEM DEVELOPMENT, U.S.O.E. Project No. 6221A. Toledo: Center for Educational Research and Services, College of Education, The University of Toledo, 1974.

34. William Wiersma, Jr., Stuart J. Cohen and others. SECOND STAGE TEACHER CENTER AND CBTE DEVELOPMENT AND IMPLEMENTATION, PART V, EVALUATIVE RESEARCH ON THE ELEMENTARY TEACHER EDUCATIONAL MODEL, U.S.O.E. Project No. 6221A. Toledo: Center for Educational Research and Services, College of Education, The University of Toledo, 1974.

35. *Ibid.*

36. *Ibid.*

37. The external evaluators were: Theodore Andrews, Director, Multi-State Consortium on P.B.T.E. William H. Drummond, Professor of Education, University of Florida. Stanley Elam, PHI DELTA KAPPAN. Richard A. Graham, then with the Brookings Institute (former Director of Teacher Corps).

based in Oslo, Norway. The use of this instrument was coupled with a case study of the CBTE program prepared by Ruben Richert of IMTEC who spent five days visiting the program in May, 1976.[38] The extensive data from IMTEC's activities have been disseminated to CBTE faculty but still await more complete analysis. A full report of GIL data and the case study were provided at an IMTEC Seminar: Training for Change, held in Gustablikk, Norway, December 4-11, 1976.

The culmination of previous efforts (excepting the IMTEC study) was a decision by those operating The University of Toledo CBTE program to develop a comprehensive research-evaluation model that would ultimately make possible complete program evaluation and validation. A research design conference was convened May 9-10, 1974, and Robert S. Soar, Professor of Education, University of Florida served as conference consultant. The results of this meeting and various discussions following it, some of which included consultation with Frederick J. McDonald, Director of the National Commission for Performance-Based Education, Educational Testing Service, were the creation of a research-evaluation model presented in Chapter 1 of this monograph. This research-evaluation paradigm provides the base for a considerable research-evaluation effort that needs considerably more planning consideration to establish a full University of Toledo teacher education research and evaluation program.

The major goal of planning that resulted in the paradigm for research and evaluation of the Toledo CBTE program was to develop and operationalize the evaluation component of The University of Toledo CBTE program with both preservice and inservice teacher populations, and to generate information establishing the linkage between teaching performances learned and their effects on children in terms of pupil behavior and outcomes.

This comprehensive goal implied a number of specific objectives related to evaluation: These were identified as follows:

1. To conduct the necessary planning with all individuals and agencies involved in order to carry out evaluation studies.

---

38. Decentralized Project No. 4 (Special Activity), International Management Training for Educational Change (IMTEC). TRAINING FOR EDUCATIONAL CHANGE: INTERNATIONAL PROGRAM FOR TEACHING TRAINING INSTITUTIONS, CASE STUDY OF THE COLLEGE OF EDUCATION, UNIVERSITY OF TOLEDO. Oslo, Norway: IMTEC, Oct. 1, 1977. 36 pp.

2. To identify a series of the field studies and to structure these studies as to schedule, materials, and teachers involved.

3. To conduct the necessary applied research in order to establish the links between teaching performances being learned and their effects on pupils.

4. To plan and conduct follow-up studies of graduates of the Toledo CBTE program.

The focus of the proposed research-evaluation program continues to be on the relationship of teacher behavior and pupil behavior and outcomes, and the effects of variations in teacher behavior upon pupil behavior and outcomes. Initially, of necessity, the major emphasis will be on pupil behaviors rather than long-range pupil outcomes, although these are not mutually exclusive. A pupil outcome may be manifested through an immediate pupil behavior. However, the chain of effects from teacher training experiences to teacher performance to pupil behavior to pupil outcomes has a multitude of interrelated links or factors. The discussion of the paradigm in Chapter 1 provides a broad review of our thinking on the research-evaluation tasks before us. Our principal strategy is to organize a coordinated effort that will result in an integrated research and evaluation program.

The foregoing discussion provides an illustration of the complex concerns confronting teacher education planners, developers, and implementers who are attempting to assess the effectiveness of preservice teachers (program products) and instructional programs. Nevertheless, a valid teacher education curriculum should provide for the acquisition of competencies with demonstrated capacity to effect changes in the behavior of those undergoing teacher training as well as those individuals who are the recipients of the trainees' behavior. The validity of such a curriculum can only be established through a research and evaluation effort that relates the behavior of the teacher to that of the pupil.

Local Planning Group Meeting

The specific planning for the continuing evaluation and supportive research activities of The University of Toledo's CBTE program was organized by the project staff and the executive committee as reported in Chapter 2. The Local Planning Group (LPG) consisted of selected members of The University of Toledo Teacher Education

Policy and Advisory Committee (TEPAC), staff members of The University of Toledo, Project 419, Phase II, Curriculum Project and the project staff and executive committee. This group totaled 31 members. Their names are listed in the Appendix.

The suggested topics for Local Planning Group discussion were organized by the executive committee as listed below. These were equivalent to the first two topics and questions utilized for the State Planning Group meeting that appear in the Appendix. They are repeated here for continuity.

I. **Teacher Education Research and Evaluation at The University of Toledo and its Congruence with National Teacher Education Research and Evaluation.**

1. What are the research and evaluation parameters that exist in Ohio?
2. What is the relationship of Ohio teacher education research and evaluation to national research efforts in this field?
3. What are the general research and evaluation directions in teacher education that need to be addressed in Ohio?
4. Is there a need for a "coordinated" approach to research and evaluation in Ohio?
5. What specific research and evaluation is needed in Ohio to provide better congruence with such research and evaluation effort nationally?
6. What teacher education research questions need better definition in Ohio to bring them in line with national concerns?

II. **Teacher Education Research and Evaluation Implied and Needed for the Operation and Validation of the New State Standards for Colleges or Universities Preparing Teachers.**

1. What is the potential for research and evaluation support under the "New State Standards?"
2. What are the existing parameters for research and evaluation suggested by the "New State Standards?"
3. Which standards need research and evaluation effort?
4. What are the researchable questions suggested by the "New State Standards?"

5. What is the broad design of the research and evaluation effort necessary to validate the "New State Standards?"

6. What are the research and evaluation priorities under the "New State Standards?"

8. What general research and evaluation directions are needed and dictated by the highly increased emphasis on student field experiences in the "New State Standards?"

9. What are the relationships between entry — exit — one-year-or-more removed characteristics for teacher education students and graduates in terms of research and/or evaluation?

The two topics and questions were mailed prior to the meeting to the Local Planning Group members along with a meeting agenda and a position paper. The position paper for the participants of the LPG appears in the Appendix. The LPG meeting agenda was as follows:

AGENDA

Meeting of Local Planning Group

February 14, 1977

Quality Inn, Toledo, Ohio

Time	**Program**
10:00 — 10:30 a.m.	Research Directions in Teacher Education of Concern to the College of Education, The University of Toledo and its CBTE program — Dr. George E. Dickson, Dean, College of Education.
10:30 — 11:15 a.m.	Project 419, Redesign of Teacher Education, and its Relationship to Research and Evaluation in Teacher Education — Dr. Patricia Mills, Director, Project 419, Phase II.
11:15 — 12:00 Noon	Review of The University of Toledo, Project 419, Curriculum Grant, Pilot Project— the Development of an Evaluation Component for the CBTE Program — Dr. Clyde Dilley, Project Director.

12:00 Noon — 1:15 p.m.	Luncheon and Introduction to two Group Discussion Topics:
	(1) Teacher Education Research and Evaluation at The University of Toledo and its Congruence With National Research and Evaluation Efforts — Dr. Richard Ishler, Chairman Dr. William Wiersma, Jr., Recorder
	(2) Teacher Education Research and Evaluation Implied and Needed for the Operation and Validation of the New State Standards for Colleges or Universities Preparing Teachers — Ms. Nanci Lucas, Chairman Dr. Thomas Gibney, Recorder
1:15 — 3:00 p.m.	Group Meetings Concerning the two Discussion Topics.
3:00 — 3:30 p.m.	Group Reports and Meeting Conclusions— Group Recorders.

Prior to assembling a final statement concerning the group meetings, a report of each discussion group was sent to the participants of the Local Planning Group for their reactions.

Group I. Teacher Education Research and Evaluation at The University of Toledo and its Congruence with National Research and Evaluation Efforts. Group I discussion began with a brief review of the objectives of the NCPBE and the kinds of research questions addressed in the California Beginning Teacher Evaluation Study. In considering the research and evaluation parameters that existed in The University of Toledo context, it was agreed that research initially must be conducted with teacher education students; a setting and structure for evaluation of inservice teachers was not contemplated. It was thought possible that some longitudinal research could develop with future graduates of The University of Toledo program.

There was no group concern with comparative studies, and it was decided that, at least initially, research should not involve comparative studies. Research would center on attempting to explain what was happening in the teaching/learning situation and would

attempt to relate the variables operating in that situation. To the extent possible, the research should occur in a variety of settings such as rural and urban. It was further suggested that it would be well to consider the use of other useful instruments in addition to the nationally developed procedures involved in the California Beginning Teacher Evaluation Study.

It was further agreed that initial research efforts should attempt to obtain some measures of student teacher effectiveness. This would be in keeping with the research at the national level dealing with effectiveness in teaching. It was suggested that The University of Toledo emphasis should also include the relationship between the teacher education program and student performance. This position has a tie-in with NCPBE on-going and proposed research on teacher effectiveness, and the use of nationally developed instruments.

The matter of affective indicators of effective teaching was discussed. The pursuing of this research direction would likely require measuring instruments from outside the field of teacher education. The point was also made that research on attitudes probably should not be singled out as separate studies but incorporated in other studies. Attitude effects, however they are ultimately defined, may be filtered out of various studies.

In order to maintain congruence between the efforts at The University of Toledo and the national level, it was emphasized that there should be some standardization of procedures, especially with the measurement instruments. In this way, desired comparisons can be made in the sense of validating the research model and identifying consistent results, not in the sense of comparing one group of teachers with another. The group decided that University of Toledo efforts are congruent with national efforts and tied in well with the NCPBE project. However, there was also consideration on how such efforts might tie in with other projects such as those that may emerge from new federal legislation concerning teacher centers and handicapped students. It was felt that in addition to research on attitudes, research that reflects different cultures requires better definition. The persistent research question that has been reasonably well defined but defies an answer is: "Is there a common set of competencies necessary for effective teaching?" If such a set of competencies does exist, do we go beyond this set for certain teachers at certain levels?

The discussion concluded with the observation that there is a need for educational professionals to exercise more control of their profession.

Group II. Teacher Education Research and Evaluation Implied and Needed for the Operation and Validation of the New State Standards for Colleges or Universities Preparing Teachers. Group II discussion suggested the following research and evaluation concerns:

1. The testing of relationships among student-teachers and cooperative teachers who have/have not been involved in a planned professional development program.
2. The benefit of prior clinical and field experience to student teachers. (What part of the additional 300 hours field experience should be prior/after student-teaching? Does more field experience for a student lead to different relationships with pupils? What field experiences are appropriate for career decisions and the other professional education course blocks?)
3. The identification of entering student behaviors and characteristics and the tracing of them through undergraduate programs onto the job. (Which aspects of the program change the students' behaviors? What change in student behaviors are related to the program experienced?)
4. The evaluation of inter-college cooperation—subject matter professors and methods professors planning and teaching together—vs. separate college preparation.
5. The definition of the characteristics of a successful teacher trainer? (Does the recency or length of teaching experience have an effect upon the effectiveness of a teacher trainer? Does publishing have an effect on the effectiveness of a teacher trainer? etc.)
6. The establishment of a criterion-referenced follow-up study of teachers that would be related to the improvement of The University of Toledo's undergraduate program.

On the basis of participant reactions to the meeting, the following additions in the form of questions were suggested for inclusion in the final report:

1. Do cooperating teachers with CBTE training and skills in behavior modification, diagnostic-prescriptive methods of in-

struction, interaction analysis, etc., make better cooperating teachers?

2. Do the teachers with the above skills make better teachers?
3. Can research be done to establish suitable criteria for the identification of cooperating teachers?

Summary. On the basis of the group reports and the suggested revision items, the following areas were identified for research and evaluation of The University of Toledo's CBTE program.

1. Toledo teacher education research should center on the explanation of what is happening in the teaching-learning situation and relate the variables operating in this situation.
2. Such research should be conducted in a variety of settings, rural and urban.
3. The Toledo research and evaluation emphasis should stress the relationship between the teacher education program, the student teacher performance, and pupil behavior and outcomes.
4. The professional performance of student teachers and cooperative teachers who have/have not been involved in a planned professional development program should be examined.
5. The effect of prior clinical and field experiences upon the performance of student teachers should be researched.
6. Student behaviors and characteristics should be identified when undergraduates enter the College of Education. The changes in student behavior that are related to the program should be examined.
7. A criterion-referenced follow-up study of student teachers should be established as they start teaching. A criterion-referenced follow-up study of first-year teachers should be initiated with criteria based on their earlier performances as student teachers. The research data collected should be used primarily for improvement of The University of Toledo's teacher education program.

A Project Related to Local Planning

During the 1976-77 school year a Teacher Education Curriculum Grant (Project 419, Phase II) was funded for The University of Toledo that had a direct relationship to evaluation and supportive

research activities. This project involved the development of an observation and data collection system necessary for determining the effects of the Toledo undergraduate CBTE program upon the student teachers and the pupils they taught. It involved student teachers with mathematics instruction and utilization of nationally known observational instruments. The results of the project will be used in developing and operationalizing a portion of the evaluation component of The University of Toledo CBTE program.

The project focused on the initial development of an evaluation component for The University of Toledo's CBTE program. Project activities were designed to develop a process, through observation, for determining program effects upon the teacher education student teachers and the pupils they taught. A pilot study was conducted with ten student teachers in the area of elementary mathematics. The specific project objectives were:

1. To develop the observation and data collection system necessary for determining program effects upon the teacher education student-teachers and the pupils they teach.
2. To develop the evaluation procedures and assessment instruments necessary for assessing student teachers' performance skills as they relate to teaching behavior.
3. To conduct a pilot study for determining the effects of teaching in elementary mathematics. The pilot study was conducted during the second semester of the 1976-77 school year involving ten student teachers in five field settings.

The project staff consisted of nine professors from The University of Toledo. After careful review of several observational procedures, two instruments were selected. The instruments selected were **Anecdotal Processing to Promote Learning Experience** (APPLE), developed by Nadine Lambert[39] of the University of California and the **Reading and Mathematics Observation System** (RAMOS) developed by Robert Calfee[40] of Stanford University. Training sessions for the Toledo Project staff in using the two instruments were conducted in Toledo by personnel from the University of California,

39. Nadine M. Lambert and Carolyn S. Hartsough, "APPLE Observation Variables as Measures of Teacher Performance," JOURNAL OF TEACHER EDUCATION, 27 (Winter 1976): 320-323.

40. Robert Calfee and Kathryn Hoover Calfee, "Reading and Mathematics Observation System: Description and Measurement of Time Usage in the Classroom," JOURNAL OF TEACHER EDUCATION, 27 (Winter 1976): 323-325.

Berkeley and Stanford. The two observational instruments were slightly revised for use in the Toledo project and used for observing student teachers by the nine project staff members and two additional trained observers.

APPLES and RAMOS, although somewhat developmental in nature, have been used previously in other studies of teacher effects. The APPLE instrument focused on pupil behavior, providing an anecdotal description of such behavior. The RAMOS instrument focused upon teacher behavior. Both instruments have lexicons of systems for classifying the observed behavior.

Ten student teachers were identified and their cooperation obtained, along with the consent of the school principals and the supervising teachers. The student teachers were fully informed about the project and advised that the data collected would not be used in determining their student-teaching grades. Four student teachers were observed during the training phase of the pilot project. Each of the remaining six student teachers in the data collection phase was observed ten times on each of the RAMOS and APPLE observation systems, with an observation being approximately 30 minutes in length.

The project staff conducted most of the observations along with two additional observers employed specifically for this purpose. This project staff assignment helped the staff become increasingly familiar with the observational instruments used and provided a better understanding of the data generated.

The data collection for the pilot study occurred during late February and early March, 1977. A total of 120 observations were taken, and a number of reliability checks were conducted. Although each student teacher was observed ten times on each observation schedule, such observations were conducted simultaneously with at least two observers in each observed classroom. One observer used a RAMOS schedule and the other an APPLE schedule at the same time.

The substantive results of this project[41] were as follows: (1) the observation teaching forms were found appropriate and feasible

---

41. Clyde Dilley, et al., Project 419, Phase II, Curriculum Study, THE DEVELOPMENT OF AN EVALUATION COMPONENT FOR THE CBTE PROGRAM, Toledo: Center for Educational Research and Services, The University of Toledo, June, 1977.

with some revision for ascertaining student teaching effects, (2) explanations of student teacher and pupil behavior were obtained in terms of time spent, and (3) an observational procedure was developed for use in field situations. The findings for external dissemination provide an initial basis for program evaluation in teacher education.

The most noteworthy result of the project was the demonstration of the feasibility to conduct systematic observations of teacher behavior yielding reasonably objective data. It was demonstrated that the RAMOS and APPLE instruments can be effectively used to provide relevant data for evaluating the effects of a teacher education program. Also, it was determined that observers with experience in teaching could be trained effectively to use the instruments with a minimum of three training sessions.

Chapter 4

RESULTS OF PLANNING FOR RESEARCH AND EVALUATION AT THE STATE LEVEL: THE STATE PLANNING GROUP MEETING

The second major component of the planning project was planning for research and evaluation in teacher education at the state level. The ideas and background for this meeting were originally generated at the June, 1975, meeting of the National Commission on Performance-Based Education in Washington, D.C. At that meeting multiple-state plans were developed as well as a consortium plan for the states involved.[42] Many of the ideas of the original plan for Ohio that was developed at that meeting were retained in this planning project. Some modifications were necessary because of the reduced budget and because implications of the new Ohio **Standards for Colleges or Universities Preparing Teachers** were more carefully considered than in June, 1975. However, for the most part, these implications were highly compatible with previous planning efforts.

Context for the State Planning Meeting

The general objective for planning at the state level as stated in the project proposal was:

> To conduct planning on a statewide basis for the research, evaluation and development projects necessary to implement adequately the new **Standards for Colleges or Universities Preparing Teachers.**

This was a broad objective that allowed considerable flexibility in determining planning procedures and personnel to be involved in the planning process.

The general rationale for planning for research and evaluation in teacher education at the state level is much the same as for the local level. This rationale was discussed in detail in the preceding three chapters and will not be repeated here. However, the assumption that teacher education involves numerous components of the education profession merits emphasis. These components are: colleges, universities, public (and private) schools, teacher associations, and the State

---

42. National Commission for Performance-Based Education, DEVELOPMENT OF A PLAN FOR INTER-STATE COOPERATION IN RESEARCH ON TEACHER EFFECTIVENESS. Princeton, N.J.: Educational Testing Service, July, 1975. (Xeroxed, distribution limited to meeting participants.) The "Ohio Plan" is found on pp. 54-67.

Department of Education. This assumption has definite implications for who must participate in a state planning meeting. All of the above components were represented at the meeting.

Membership of the Planning Group

Membership of the State Planning Group (SPG) consisted of 44 individuals, representing the professional components described above. Specifically, the numbers and the professional affiliations were as follows:[43]

State University Personnel	14
Private University or College Personnel	7
Public or Private School Personnel	16
State Department of Education Personnel	4
Teacher Organization Officials	2
Ohio Foundation Representatives	1
Total	44

The representatives from colleges and universities were administrators and professors. There were some deans and department chairmen in attendance. Correspondingly, representatives from public schools included superintendents, principals and teachers. The major teacher organizations and teacher education organizations in the state were represented. The Martha Holden Jennings Foundation sent a representative since there was an expression of interest by foundations in possible later funding related to the planning.

Specific Information for SPG Members

A position paper was circulated to all prospective SPG members prior to the meeting. This position paper has previously been introduced. It appears in the Appendix of this report. The detailed agenda for the meeting was planned by the executive committee and circulated before the meeting to invited participants. The meeting was conducted on March 9-10, 1977, at the Hospitality Inn, Columbus, Ohio.

The State Planning Group Meeting

The agenda of the State Planning Group meeting describes meeting activities quite specifically. That agenda appears below:

AGENDA
State Planning Group Meeting
Hospitality Inn
Columbus, Ohio
March 9-10, 1977

43. A listing of the names and institutional affiliations of all members of the SPG appears in the Appendix.

Time	Program
11:00 a.m. — 12:00 Noon	Introduction — Dr. Paul M. Hailey, Director, Division of Teacher Education Certification, State of Ohio Department of Education.
	Introduction to the Keynote Speaker — Mrs. Virginia Kunkle, Assistant Superintendent of Public Instruction, State of Ohio Department of Education.
	"Building a Professional Culture for Teaching" — Dr. Robert Howsam, Dean, College of Education, University of Houston.
12:00 Noon — 1:45 p.m.	Luncheon
	"Potential for Research and Evaluation in Teacher Education Redesign" — Dr. Patricia Mills, Assistant Dean, College of Education, Bowling Green State University and Director, Project 419, Phase II.
1:45 p.m. — 2:30 p.m.	Basic Concerns Involving Research and Evaluation in Teacher Education.
	1. Teacher Education Research and Evaluation in Ohio and its Congruence with National Teacher Education Research and Evaluation Efforts — Dr. Roger Iddings, Dean, College of Education, Wright State University.
	2. Teacher Education Research and Evaluation Implied in the New State Standards and Needed to Validate Them — Dr. Gay Pinnell, Supervisor, Teacher Education, State of Ohio Department of Education.
	3. Teacher Education Research and Evaluation Desired by Separate Sectors of

the Professional Education Community (State and Private Universities and Colleges, the State Department of Education, and Schools (teachers and school administrators).

Dr. Edward Jirik, Director, Instruction and Professional Development Division, Ohio Education Association.

4. Coordinating and Funding Research and Evaluation Efforts in Ohio —

Dr. William Wiersma, Jr., Director of Research and Director of the Center for Educational Research and Services, The University of Toledo.

2:30 p.m. — 3:00 p.m. Meeting Intermission

3:00 p.m. — 5:00 p.m. Group Meetings Utilizing the Four Major Concerns Above

Group I

Dr. Roger Iddings, Chairperson
Dr. George E. Dickson, Recorder

Group II

A — Dr. Patricia Mills, Chairperson
Dr. Chester Addington, Recorder

B — Dr. Gay Pinnell, Chairperson
Dr. Raymond LeGrand, Recorder

Group III

Dr. Edward Jirik, Chairperson
Ms. Carol Matthews, Recorder

Group IV

Dr. William Wiersma, Chairperson
Dr. Dean W. Moore, Recorder

6:30 p.m. Dinner

"Remarks" — Mrs. Virginia Kunkle

March 10

9:00 a.m. — 11:30 a.m.	Continuation of Group Meetings
11:30 a.m. — 12:00 Noon	Intermission
12:00 Noon — 2:00 p.m.	Lunch — Reports by Group Recorders
2:00 p.m. — 2:30 p.m.	"What May Likely Happen Next" — Dr. G. Robert Bowers, Assistant Superintendent of Public Instruction, State of Ohio Department of Education.

The keynote address by Dr. Howsam set the stage for the meeting. It provided the participants with a verbal presentation whose context was supportive of the position paper distributed earlier. Dr. Howsam's address appeared in Chapter 2.

Following the luncheon on the first day of the meeting, a brief overview of the potential for research and evaluation in teacher education was provided. The theme of the presentation emphasized relationships of research and evaluation to the new standards. After the luncheon presentation, the leader of each of the four discussion groups provided a brief statement of the primary discussion topic for the group. These four topics were then discussed in detail by discussion groups. (Actually, there were five discussion groups since the second topic was considered by two groups.) Group discussion continued for the remainder of the first day, resumed the next morning, and continued until the lunch break.

The membership of each discussion group was structured prior to the SPG meeting by the project co-directors. All groups had broad representation of various educational positions and affiliations. For example, small college, university, and public school personnel were represented on all groups. Each group focused on its topic in terms of the research and evaluation needed and potential future courses of action. The discussion leaders of each group had developed questions, in addition to those previously provided participants on group topics, to initiate and guide group discussion.

Group Discussion Reports

The substantive planning in the meeting took place during the group discussions. The position paper, keynote address, and introductory statements by the group leaders were designed to set the

context for group discussions. At the close of group meetings, as the agenda indicates, results of all discussions were reported to the SPG. Each recorder presented his report verbally. A closing statement ended the SPG meeting. Because the reports of the group recorders represent the unabridged results of the discussions, these reports, as summary statements, are now presented in their entirety. They are written versions reconstructed from recorders' notes.

Group I. **Teacher Education Research and Evaluation in Ohio and its Congruence with National Teacher Education Research and Evaluation.**

Chairperson: Roger Iddings

Recorder: George E. Dickson

What are the research and evaluation parameters that exist in Ohio? The discussion of this question centered on the limitations and/or extent of research and evaluation in teacher education in Ohio. It was obvious that the extent of teacher education research and evaluation in Ohio is unknown but should be assessed in some manner. The general opinion was that the amount of such research would likely be similar to that being conducted in other states. The question was raised as to whether empirical teacher education-teacher behavior-pupil behavior-pupil learning outcomes research could be attempted in Ohio schools and classrooms. It appeared that such research could take place as a number of teacher competencies have been identified and the basic relationships involved in teacher effectiveness studies could certainly be examined in Ohio schools. However there were a number of limitations noted to such research as follows:

1. There will be some difficulty in teacher effectiveness research directions that might be construed as being evaluation of teachers.
2. The current concern of teachers and others for "accountability" could limit the research possible with classroom teachers.
3. There should be every effort made to stay away from comparative studies that would tend to contrast individuals, groups, or systems with each other.

4. Teacher education research and evaluation must operate in such a way that people do not feel that they are being taken advantage of or compromised. A "trust" problem is apparent and this must be overcome between those doing the research and the subjects of such research.

There was the general feeling that teacher effectiveness research efforts could be negotiated with Ohio teachers and schools. Such research would not necessarily have to be tied to competency-based teacher education programs; CBTE does focus on research, but this research could originate from any teacher education program base.

It was evident that the areas of research and evaluation in Ohio need to be identified clearly before the parameters for such research can be fully considered.

What is the relationship of Ohio teacher education research and evaluation to national research efforts in this field? Teacher education research and evaluation in Ohio is individual and sporadic. The relationship of such research to national research efforts is not known. However, there is no reason why teacher education research and evaluation in Ohio cannot be congruent to general national directions. Some general national directions for teacher education research were identified as:

1. Teacher effectiveness studies.
2. Studies on the relationships between teacher training and behavior and pupil behavior and outcomes.
3. Studies on teacher techniques and their effects on learning.
4. Studies which look at the cost of applying the new state standards for teacher education and other teacher education cost analysis research efforts.
5. Studies to develop instruments to examine teacher and pupil behavior and outcomes more appropriately.

What are the general research and evaluation directions in teacher education that need to be addressed in Ohio? In respect to the new state standards for teacher education, it appears that the research base is very thin and this should be investigated. The **Standards** seem to be created from philosophical and conceptual positions rather than from research evidence.

The group agreed that there was a need to look at the graduates produced from teacher education programs during their first year in service. Such evaluation needs to be developed on the basis of the needs of the probationary teacher, and, in this process, the concept of preservice and inservice education needs to be broadened in terms of who and what has helped the young teacher most.

Supervisors in schools systems are increasingly asking what new teachers know, what they can do, and what can be expected of them. Thus, research and evaluation could go forward in terms of specifying the needed competencies of beginning teachers. Further discussion of the competency question revealed an interest in learning whether teacher education preparation in a particular direction (such as preparation to teach in IGE schools) results in producing a better teacher than teacher preparation for general school programs. The question was asked as to whether we are able to prepare teachers for specific kinds of schools — rural, inner city, suburban. It was suggested that Ohio's interest in IGE might provide a springboard for researching the particular skills and abilities needed by beginning teachers to operate in IGE schools.

The group concluded that we need to agree upon a statewide process and direction for research and evaluation and this effort should not be a "one shot operation" in some portion of an academic year. It was indicated that there was a need to develop a statewide model for the coordination and operation of teacher education research and evaluation.

Is there a need for a "coordinated" approach to research and evaluation in Ohio? There was definite agreement that there is a need for such coordination in Ohio which would involve various personnel and systems. A model for statewide coordination of teacher education research and evaluation is needed as well as the funds to develop and operate such a model. An Ohio model could be developed in proposal form and funding sought which would center on:

1. Identification of what is going on in teacher education research nationally and statewide.
2. Identification, development and evaluation of research priorities.
3. Emphasis on dissemination of research and evaluation findings.
4. Creation of a research and evaluation experimental environment for Ohio.

Attempts to provide state emphasis on teacher education research and evaluation should not inhibit or eliminate individual research and evaluation efforts presently ongoing.

What specific research and evaluation is needed in Ohio to provide better congruence with such research and evaluation efforts nationally? The group felt that this question had been covered previously.

What teacher education research directions need better definition in Ohio to bring them in line with national concerns? The question implies that better definition in Ohio is obviously needed and quite necessary. Much of the present research and evaluation ongoing in the state is haphazard and ill defined. There was general consensus that the way to achieve statewide teacher education research and evaluation is through a group-centered or system-wide effort built around program delivery rather than a concentration on individual teacher evaluation. The emphasis would be on collaboration between people and agencies and all of the "role-players" in various educational operations.

Group II-A. **Teacher Education Research and Evaluation Implied in the New State Standards and Needed to Validate Them.**

Chairperson: Patricia Mills, replaced by Paul Hailey because of illness.

Recorder: Chester Addington

Dr. Mills called the meeting to order and charged the committee with its duties. Because she was not feeling well, she turned the meeting over to Dr. Hailey who chaired the meeting on March 9. Dr. Mills chaired the meeting on March 10. The group discussed having the recorder organize the report according to the redesign **Standards** (Red Book), but in reviewing the notes it appeared to the recorder that a chronological order was more desirable. The report follows the order of discussion.

Discussion March 9

Only about one-third of the research project proposals submitted to the State Department of Education in the second year of Project 419 were funded. It was suggested that the proposals not funded be examined for researchable topics for future consideration.

One of the proposals (Kent State) was approved but could not be funded from the available appropriation for Project 419 research projects. A research project related to this proposal was discussed.

The research problem would be to compare the competencies of graduates in teacher education who have had field experiences in each of three demographic areas, rural, urban and suburban, with graduates who have had experiences in only one area. It was mentioned that some prior research on this matter (Bowling Green State University) does not support any long-term difference in competencies of the two groups. Other experiences show that such a variety of field experiences may cause some teacher candidates to select themselves out of teaching. Other colleges report that as more field experiences are required, the percentage of students who drop out of teacher education has become smaller. It is likely that factors other than the field experiences alone, such as the tightening job market, may have influenced the results.

Standard EDb-303-01 (Organization, Recruitment and Counseling). Research is needed on what criteria for selection provide some evidence of having value for identifying future outstanding teachers.

Research is needed to determine if different criteria for selection may be related to success in schools with a different demographic setting and clientele. The setting of the schools may require teachers representing a variety of qualities to satisfy the demands of the schools.

Research is needed to determine criteria for the selection of teachers who can relate to the Ohio **Standards for Elementary and Secondary Schools.**

Research is needed to determine whether the **Laws and Regulations Governing Teacher Education and Certification** (the Blue Book) show a relationship to the school expectations of teachers. in other words, does the process in teacher education relate to the teacher graduate as viewed by the consumer, the schools?

Standard EDb-303-02(A) (Curriculum, Body of Knowledge, Skills, Attitudes and Values). There is need for research on the relationship between the objectives stated in teacher education programs and the graduate produced by the institution. Such a study should focus on the body of attitudes, values, skills, and knowledge portion of the objectives.

Standard EDb-303-02(B) (Curriculum, Significant Academic and Social Concerns). There is need for research on the relationship of college instruction in human relations and the success of teachers in

their work with students, other teachers, parents, etc. What is the most effective method for teaching human relations, a course in human relations — integrating instruction in human relations throughout the program — human relations modeling by the faculty? What is the best mode for human relations instruction?

Standard EDb-303-02(C) (Curriculum, Clinical Experiences). What are the diagnostic and prescriptive instruments and skills most needed in clinical experiences to develop competent teachers?

What does a review of literature in education and in other fields such as medicine or business reveal about effective clinical instruction in the diagnostic and prescriptive functions? One question might be what site is best suited for clinical instruction? Is it best handled in elementary and secondary schools, in controlled "laboratory" schools, or on the college-university campus?

Standard EDb-303-02(D) (Curriculum, Field-Based Experiences). What evidence can research supply on the personal qualifications of the clinical professor? Is there evidence that teaching experience in elementary or secondary schools should be a requirement? If so, how much and in what settings?

Standard EDb-303-02(E) (Curriculum, Clinical and Field-Based Experiences). Research is needed to determine at what points the clinical-field experiences outside of student teaching are most effective. Would it be better to have student teaching in the junior year and follow it with clinical experiences? When, in the four year program, is the optimum time for field experiences, for student teaching, for clinical experiences?

Standard EDb-303-07 (Financial Support). Could research develop a standard mode or method for cost-benefit analysis in teacher education?

Could research identify parts of the **Standards** including financial that could be pre-audited by the State Department staff to permit the visitation teams to analyze the data more accurately and effectively in evaluating the institutions? The State Department's staff might be able to help both the institution being evaluated and the teams doing the evaluation if acceptable methods and forms could be devised.

General. Research is needed to determine whether the standard four-year format for preservice teacher education should be retained. Can research support or refute the claimed advantage for more than a

four year or five year program? What evidence is there of the effectiveness of a teaching internship of the entry year concept, or of immediate inservice staff development programs for beginning teachers? The school psychologist program might supply a model for study.

What training for cooperating teachers will contribute to producing a more effective new teacher through student teaching or other field experiences?

Does a cooperating teacher become a better classroom teacher because of work with student teachers or other field experience teacher candidates? Do college instructors become better college teachers if they are involved in supervising student teachers or in other field experiences?

Discussion March 10

The group spent a few minutes reviewing notes from the previous day and discussed whether it would be better to present a joint report with Group B or have separate reports. After a short conference with some members of Group B, it was decided to present reports from each group.

The discussion turned to the process of bringing about change in programs to implement the requirements of the new **Standards.** It was decided that there might be a research study involved in the relative effectiveness of various strategies for change in curriculum development.

The discussion returned to items in the new **Standards** at this point.

Standard EDb-303-04 (Faculty). Can research provide hard evidence to support any particular student-faculty ratio such as 14 to 1 in teacher education as being most effective? Is it possible that the most effective ratio may vary with programs and diversity in institutions?

Standard EDb-303-05 (Teacher Education Student Services). What unique advising and counseling needs do teacher education students have? Can research demonstrate what methods of advising are most effective in meeting the counseling needs of teacher education students?

Standard EDb-303-06 (Facilities). Can research identify physical facilities that are essential to a successful teacher education program? Are there certain equipment and building requirements without which a program cannot be successful? What are the effects of physical facilities on students and faculty?

General. Could research identify some items for, some areas of, some methods of, and the effects on programs of faculty exchange, consortium arrangements, or joint ventures among teacher education institutions or between colleges and universities with elementary and secondary schools? Such research might focus on total program or on special areas such as Educationally Mentally Retarded, Learning Disabilities, etc.

Group II-B. Teacher Education Research and Evaluation Implied in the New State Standards and Needed to Validate Them.

Chairperson: Gay Pinnell

Recorder: Raymond LeGrand

The deliberations of this group are prefaced with the chairperson's charge to the group. The research and evaluation topics are then classified and listed into broad categories. Many of the topics themselves are still very general.

Teacher education redesign, the new **Standards,** require that educators at all levels ask themselves the question "why?"

We are seeking to prepare teachers who are able to do more than follow a prescribed methodology. We seek to prepare teachers who are decision makers and who make instructional decisions based on knowledge and careful diagnosis. Such teachers are able to know **why** they do what they do. As teachers of teachers and planners of teacher education programs, we must also ask ourselves "why" we are doing what we do.

The new **Standards** represent the best thinking of a diverse group of professional educators and concerned citizens. They present very positive new directions for systems which we know must change. Carefully planned research to test the ideas and assumptions underlying the standards is essential.

Our task in Group II-B is to explore research and evaluation questions related to the implementation and validation of the new standards for teacher education. We are here not to seek the answers

but to find the questions which have priority in the redesign of teacher education.

Research Topics:

1. Field-based, clinical, student teaching experiences (our first priority research area).
   - 1.1. Definers for distinctions between field-based and clinical experiences.
   - 1.2. Characteristics and effects of field-based and clinical experiences.
   - 1.3. Relationships between early field-based experiences and student retention/self-selection.
   - 1.4. Characteristics of teachers who work with field experience students.
   - 1.5. What are appropriate clinical experiences at various levels and areas (subject matter, age, etc.)?
   - 1.6. What observational skills are needed for successful, early field experiences?
   - 1.7. How can observational experiences be developed cooperatively? (school/college).
   - 1.8. Effects of continuous vs. "interrupted" student teaching.
   - 1.9. What are the support systems needed for teams of student teachers and for student teachers assigned to departments?
   - 1.10. Research on fifth year programs.
2. Qualifications, entry/exit, selection/self-selection.
   - 2.1. Admission, retention studies of appropriate criteria.
   - 2.2. Effects of screening on quality—effects of self-screening.
   - 2.3. Role of pre-selection experiences (e.g., future teachers organization).
   - 2.4. Follow-up studies — one year, three years, five years. Attitude changes, etc.
3. College/School Relationships.
   - 3.1. Effects of written contractual agreements with teachers, administrators, school boards, etc.

3.2. Effects of size of institution on school/college relationships.

3.3. Characteristics of effective advisory committees — roles, process, need, collegial relationships, etc.

3.4 Role definition and expectations of people in various positions: teachers, principal, supervisor, etc.

4. Knowledge, Skills, Abilities.

4.1. Are specifications of knowledge, skills, etc. wide enough to deal with all levels of teaching — elementary, middle, secondary?

4.2. What diagnostic skills effectively assist the beginning teacher?

4.3. What perscriptive alternatives at various levels/subjects are effective?

4.4. What is the congruency of course requirements and field-practice experiences?

5. Teachers' Trainers.

5.1. Characteristics and skills of successful teacher trainers.

5.2. Effects of time spent in schools of teacher trainers (prior experience teaching at elementary or secondary level).

6. Evaluation.

6.1. Effects of follow-up studies. How used? How effective? What changes as a result?

6.2. Follow-up to discover differences of different training backgrounds.

6.3. Relationship of competence in discipline and successful teaching, G.R.E. scores and successful teaching, etc.

6.4. Validity of 14:1 faculty-student ratio for teacher education operations.

7. Student Personnel Services.

7.1. Relationship of services to outcomes.

General considerations of the group indicated the field-based area as the top priority for research. There is a need for statewide focus on research and evaluation, and projects should be conducted cooper-

atively among school systems, colleges, and universities. Research studies will require some replication. Results of research studies should be disseminated and used.

Group III. **Teacher Education Research and Evaluation Desired by Separate Sectors of the Professional Education Community.**

Chairperson: Edward Jirik

Recorder: Carol Matthews

The research and evaluation problems identified by this group were classified into quite broad categories from the summary reports of the recorder. Some appear as areas of research and others are stated in problem form.

The New Standards.

Provide for continual research and evaluation of the new **Standards** and their effectiveness, including feasibility, necessity, financial implications, and problems of implementation and compliance. (There very soon must be an interpretive section to clarify the intent of each standard.)

Clinical — Academic — Field Experiences.

1. We should research and clearly define clinical, academic, and field experiences in order to facilitate the feasibility of teacher centers, portal schools, and clinical professorships. (Such as joint appointments by the public school and the university.)
2. How do clinical experiences, academic preparation and knowledge of community school life influence career decisions?
3. What is the best distribution of time for field experiences across the student's total college career? Should other field experiences be scheduled before or after student teaching?

Finance.

1. In the appropriation of additional funds for teacher education, there must be a follow up of its effectiveness of distribution to colleges and universities, State Departments of Education, and/or public school districts.
2. In future appropriations, common goals and objectives should be established for determining the effectiveness of the distribution of funds allocated to teacher education, whether this

distribution is directed to colleges and universityies, public school districts, and/or the State Department of Education.

Student Teachers.

There should be research in the general area of student teaching on such matters as:

1. The criteria for the selection of cooperating teachers.
2. The feasibility of joint supervision by universities and colleges, through some type of statewide network.
3. The establishment and granting of more responsibility to classroom teachers for the supervision of student teaching.
4. The control of placement of student teachers.
5. The establishment of specific criteria for the evaluation of a successful student teaching experience.

Certification Structure.

1. What competencies for certification are needed for effective teaching, in relation to various age groups of children?
2. A comparison of present certification levels and requirements vs. the desirability of a universal certificate or other pattern of certification should be investigated.

Additional Researchable Areas include:

1. The feasibility of identification of potential teachers at an earlier age, such as the pre-college level.
2. The perceived role of school boards, citizens, and educational community as to their specific responsibility for (and in) the cooperation needed in the total teacher education program.

Group IV. **Coordinating and Funding Research and Evaluation in Ohio**

Chairperson: William Wiersma, Jr.

Recorder: Dean Moore

The following outline is the summary report of the recorder.

Rationale for a Structure (Ongoing).

1. The National Commission for Performance-Based Education is interested in organizing systematic research efforts and funding. Descriptive research dominates at present.
2. There is a need for validating the new state **Standards.**

3. There is a need for coordinated funding and dissemination of the research results.

4. More public school-university-parent relationships are needed in identifying research problems.

Proposal.

1. Create an R and D state structure for identifying needs, prioritizing needs in relation to state redesign standards, getting funding, and disseminating findings.

2. Structure.

   Local university advisory committees (now required). State Advisory Committee to be created (25 + 2 = 27 people).

   2.1. Representation — chartered public university personnel, private college personnel, school administrator personnel, teacher personnel, parents, one state department representative and one state legislator.

   2.2. Selection by five regions — state department to select five (one of each personnel category) for each region by lottery for a total of 25 people.

   2.3. Communication — a regional committee with one elected representative from each local advisory committee would meet with the five state representatives from that region for two-way communication.

   2.4. Function — coordinate state needs in research; advise on funding; advise on creation of project research teams; develop a process for submitting and developing a coordinated research proposal.

   State Department would have responsibility to appoint a liaison-coordinator-fund raiser person and a state legislator to work with the state committee.

3. Funding — a private foundation should be contacted for funds for a pilot effort in establishing the structure.

Additional Comments. The group spent some time discussing the desirability of a state organization for coordinating research and evaluation in teacher education. It was decided that such an organization could be very useful; it could enhance necessary R and E for

implementing the **Standards**, it would make R and E more efficient, and it could assist in the dissemination of results at all levels.

Much of the discussion centered on ways to develop a state organization and to insure regional representation in that organization. In lieu of an appointed or elected procedure, it was decided to use a lottery system with five representatives from each of five areas. There may likely be some problems with this approach. Additional thinking on this matter should prove helpful.

The major organization discussed and appearing in the report was that of the state level organization. However, some attention was given to what might be called "Project Committees," which would consist of researchers from two or more institutions working on a common problem. Identifying and assisting in the organization of these project committees could be one of the major functions of the state organization.

The state organization would not have powers of approving or rejecting anticipated projects or proposals. It undoubtedly would have an advisory function. There undoubtedly needs to be considerable R and E accomplished before the Standards can be fully implemented. One indication of this is the fact that less than 50 percent, only about one-third, of the R and D proposals submitted under Project 419, Fall 1976, were funded. The state organization could also assume the monitoring of R and E projects connected with future Project 419 or teacher education redesign activities. This would involve both advising and coordinating functions.

State Planning Group Meeting Concluding Activities

The reports above were circulated to all members of the SPG for their reactions. The following cover letter to all meeting participants accompanied the reports.

> The participants of the planning meeting were divided into five groups, each discussing a major topic. Groups II-A and II-B discussed the same topic. Enclosed please find an initial draft of the results of these group discussions. The report is separated by groups, but we encourage you to read all of the group contributions and react to them. With respect to the part for the group in which you participated, please consider the content very carefully as to whether or not it adequately reflects the discussion and conclusions. Make any comments or additions you feel are appropriate.

Please return your written reaction to us by April 18, 1977. The executive committee of the project will have a two-day meeting to consider your reactions, and from this meeting a final report on the planning will be generated.

We appreciate your participation in the meeting and value your input. You will be sent a final report of the project on its completion.

Several participants responded to the report and practically all responses indicated an agreement with the content. There were a few minor suggestions such as emphasizing specific points.

As a closure to the planning meeting, Assistant Superintendent of Public Instruction, Dr. G. Robert Bowers opened by expressing appreciation on behalf of the State Board of Education and the Superintendent of Public Instruction to all participants for their efforts, and especially the executive committee. He complimented the State Planning Group participants on their interest and dedication and noted that many of those present had been active in the process of Teacher Education Redesign and were committed to its major goals.

Following his introductory comments, Dr. Bowers made the following major points.

1. Teacher Education Redesign, (the development and establishment of the new **Standards**) will likely stand, in terms of its effect on improving the quality of teaching and learning in Ohio schools, as the most significant act ever taken by the State Board of Education.

2. The full impact of the **Standards** is really over a decade away, notwithstanding their full implementation by 1980. Constant attention and assessment will be needed for ultimate realization of their dynamic, reform potential.

3. Funding to implement the **Standards** and to conduct the necessary research and evaluation emanating from them must and can be obtained.

4. Colleges and universities need to be motivated and led through the required restructuring process implicit in the implementation of the **Standards.** Teacher preparation institutions need to construct their "own new houses." The State of Ohio

Department of Education can both aid and/or impede such institutional progress by attempting to do too much, acting by fiat, etc. A most delicate balance must be struck and maintained.

5. Once implemented, the **Standards** will require periodic revision. Teacher certification standards will need major overhauling. Higher institutions and major reference groups must be encouraged to coordinate their efforts in these respects. The need for increased emphasis on the school district's role in such a process is apparent.

6. The research and development task in teacher education is complex, and no one should be drawn into complacency by thinking that it is simple. In this technological age we often associate complexity with technological advances. For example, the assemblage of a color TV set is complex and requires extremely fine performance tolerances of the component parts. Yet, it is possible to put the parts together in the prescribed manner and the finished product will not operate properly. When working with prospective teachers, teachers and others in the educational process, the procedure is considerably more complex than the assembling of a TV set.

7. There are a number of elements necessary for continued progress in research and evaluation in teacher education. We must recognize the difficulty and complexity of teaching and learning and use what psychology and other disciplines have to offer. We must recognize that teaching is both an art and a science. The art of teaching can be manifested in individual creativity and motivation, but at the same time, we must zero in with research on the science of teaching. Model development will be necessary including model implementation. Funding for such efforts is required. Research and evaluation can be accomplished and coordinated through a variety of channels.

Dr. Bowers concluded his remarks by stating, "We are on the threshhold of extending to teacher education the expectations, importance and significance needed for a true profession. The planning that this project is accomplishing will help bring us to this necessary condition."

The group reports of the State Planning Group meeting were the products of relatively intensive planning. A large number of ideas were generated and numerous procedures considered. However, a

two-day planning meeting on a very extensive and broad subject is not adequate for complete closure to the planning. The size of the State Planning Group and the shortness of the meeting did not allow for a definitive synthesis of the planning meeting results. This synthesis of the State Planning Group meeting (Columbus) as well as the Local Planning Group meeting (Toledo) appears in the final chapter of this monograph.

Chapter 5

CONCLUDING THE PLANNING: A SYNTHESIS OF PLANNING RESULTS

Although a planning effort has intrinsic value and produces some recognizable outcomes, planning is usually a means to an end rather than an end in itself. This planning project is no exception. The major value of the project lies in the results of the research and evaluation projects generated by the planning.

GENERAL CHARACTERISTICS OF RESEARCH AND EVALUATION PROJECTS

Educational research and evaluation generally have certain, unique characteristics that definitely influence how they are conducted. Teacher education research and evaluation also are affected by these characteristics. Indeed, these characteristics not only describe the nature of educational research, but they influence the models that are appropriate for educational research. To ignore these characteristics is to open the door to confusion and inefficiency in the research process.

The Balance between Basic and Applied Research

Research underlying a profession must always confront the issue of whether to emphasize the extension of knowledge or practical application. Parallels are often drawn between research in education and research in disciplines such as mathematics, chemistry, or psychology. But research in education is not the same as research in mathematics. Unlike mathematicians, the educational researcher seldom if ever can focus on "pure" research, with no consideration of the utility of the results. On the other hand, there is a tendency for educational researchers to focus on the solutions of limited problems with little regard for theoretical or conceptual frameworks. This is going too far in the other direction. The results may have little use outside of a local situation (often they have little use in the local situation); they tend to be inconclusive; and their relationship to the educational context is obscure if not confusing.

Research and evaluation in teacher education must strike a balance between basic and applied research. For many educational researchers there is little perceived value in generating knowledge for its own sake. This is to be expected because any profession must have

a utilization orientation. Yet, research conducted without adequate conceptualization and not based on a theory or framework is for all practical purposes unusable. Research and evaluation in teacher education have traditionally been too localized or focused on local problems, and somewhat lacking in adequate conceptualization.

How is an appropriate balance maintained between pure and applied research? One essential element is to conduct research and evaluation projects in the context of operational teacher education programs. The research should be viewed as on-going with results contributing to the knowledge base, as program operation is improved and its effects revealed. A necessary prerequisite to the research is a thorough conceptualization of the problem, the methodology, and the procedures.

The planning effort in this project seems to have broadened the perspective for educational research in Ohio. To be sure, there were some suggestions for highly localized and possibly some trivial research. But, participants did have the opportunity to consider the kinds of things that need to be done, especially from the state's perspective, and to a lesser extent from the national perspective. The tie-in with national efforts in teacher education research should enhance the understanding of the context for such research. With future cooperative research projects a better balance between basic and applied research should be maintained. The matter of balance lies in the nature of the research, not in the number of projects completed in each classification.

The Internal Comprehensiveness Necessary for Useful Research

The matter of balance between basic and applied research touches on the external comprehensiveness of the research. It relates to the generalizability and the usefulness of results. But what about internal comprehensiveness? As was previously indicated, Berliner[44] has provided an excellent review of difficulties associated with teacher effectiveness research. Berliner describes a number of problems connected with research such as instrumentation problems and statistical problems. At this point it is not necessary to repeat the list, but essentially a failure to overcome these problems makes for uninterpretable research results, if indeed, results are forthcoming. Past research in teacher education has not overcome impediments adequately, making the research lacking in comprehensiveness. Without comprehensiveness, the results often cannot be interpreted in a valid and useful manner.

44. David C. Berliner, Op. Cit.

It is one thing to recognize impediments to research and another matter to correct them. Also, it is doubtful that a research methodology will soon be designed that can overcome all problems of research in teacher education. But what is required and what is now feasible is a more careful conceptualization of research problems and successful attempts to overcome difficulties at a more acceptable level. To accomplish this it may be necessary to consider new and more complex models. Possibly old approaches need to be revised or extended. In any case, a more on-going approach is necessary. The development of methodology should be considered carefully. Sometimes in educational research projects there is resistance to attempts at using new methodology: the development of new methodology is often unjustifiably suspect.

As teacher education research and evaluation are generated in the Ohio context, it is necessary to consider the comprehensive nature of such research and to be receptive to new methodology. It is possible that for some projects appropriate methodology will need to be developed as the project is conducted.

The results of the planning have developed a structure for doing research and evaluation that enhances the comprehensiveness of the research. A cooperative approach to research, which has never been easy to implement, should allow for more comprehensive coverage of all necessary components. The number of narrowly conceived, relatively insignificant, isolated projects should be reduced. The interchange of ideas in Ohio, and the contact with relevant groups at the federal level should generate new approaches, possibly new methodology.

There are any number of characteristics of educational research that could be identified, but the two discussed above are most relevant for research and evaluation in teacher education. These characteristics in essence provide the context or set parameters for the research. They are important to consider because they definitely have implications for what research is done and how it is done.

RESEARCH AND EVALUATION:
THE UNIVERSITY OF TOLEDO CBTE PROGRAM

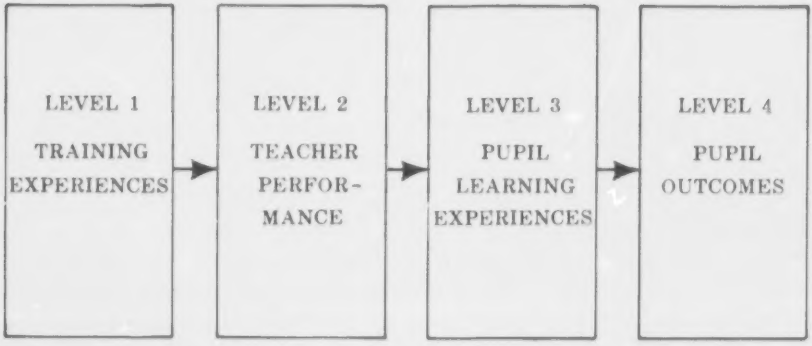
Specific research and evaluation projects must be conducted in the context of a specific teacher education program. This does not, however, mean that the research problem is limited to local concerns

and characteristics. In Chapter 1 a discussion of the model underlying The University of Toledo CBTE program was presented. That "General Model of Effects in CBTE" was broad-based and related to teacher education in general as well as to research efforts at the national and state levels.

Important as a project may be locally, it would hardly merit funding from state and national sources if its results had only local impact. Although the February 14 meeting was local, involving participants from the Toledo area, the Toledo CBTE program is not limited to a local orientation, nor will its research be so limited. The University is actively participating in the Ohio IGE Coordinating Council. Cooperative efforts with the University of Wisconsin continue, including the involvement of several University of Toledo staff in the University of Wisconsin/Sears, Roebuck Foundation project for developing inservice and preservice teacher education materials in IGE. The Toledo CBTE program has received widespread attention nationally and internationally. Hundreds of visitors from all parts of the United States and several foreign countries have come to observe the CBTE program at The University of Toledo. Faculty members of the University have appeared on many national and two international programs concerning the CBTE program. Program publications have kept pace with program dissemination efforts. Thus, the Toledo program is not a provincial or locally limited development.

Program Evaluation and Program Validation

The distinction between program evaluation and program validation is basic to this discussion. That distinction is made in the context of an earlier model introduced in Chapter 1 which is repeated here for the reader's convenience (Assessment Levels in Teacher Education by Medley, Soar and Soar).



The model or paradigm indicates four assessment levels from training experiences (Level 1) to teacher performance (Level 2) to pupil learning experiences (Level 3) ending with pupil outcomes (Level 4). The planning for research and evaluation of The University of Toledo CBTE program focuses on the relationships among these levels. The distinction between program evaluation and program validation is made with respect to these levels.

The relationship between training experiences for students preparing to teach and their performance in teaching situations as preservice teachers or program graduates (the relationship between Level 1 and Level 2) involves research in teacher training and establishing these relationships becomes program evaluation. When such thinking is applied to The University of Toledo CBTE program, the relationship between the training experiences in the program and the teaching performance of those students being trained provides the basis for program evaluation, the effectiveness of CBTE educational experiences with respect to the desired objectives and outcomes of the CBTE program.

Program validation, on the other hand, is a considerably more complicated matter and, in addition to Level 2, involves the assessment Levels 3 and 4 in the model above. These levels are pupil learning experiences and pupil outcomes. CBTE program validation must attempt to establish empirically the effects of the teaching performance of CBTE graduates upon pupil behavior, learning and outcomes. Such research is research in teacher effectiveness. When the results of CBTE programs are defined in terms of the teacher performance competencies of its graduates, the validation of those competencies is **ipso facto** validation of the program. Consequently, the output of a CBTE training program, teacher behavior and its influence, becomes the input into actual classrooms; an examination of that input, the relationship between teacher behavior and pupil learning and outcomes, provides the evidence needed for CBTE program validation.

Thus CBTE program evaluation and validation (research in CBTE) may be viewed as a two-step process. Program evaluation is the examination of the relationship between teacher education or training experiences and student teacher performance. Program validation is the examination of student or graduate teacher performance and pupil behavior and outcomes. We need to establish, empirically, that the teacher behaviors which teacher education programs teach, do in fact, produce the desired outcomes in the pupils taught. Further, such thinking about teacher education program evaluation

and validation is not limited to the CBTE format. Any type of teacher education should be so evaluated and validated. The CBTE approach simply draws attention more sharply to such thinking and effort than do traditional approaches to teacher education.

Program Evaluation — An Example. The specific, program evaluation projects will be numerous and varied. A beginning effort was described in Chapter 3 under the heading "A Project Related to Local Planning." This project involved the development of an observation and data collection system used with student teachers in elementary mathematics instruction. The project demonstrated the feasibility of using particular observational procedures and instruments. For the purpose of program evaluation, student teacher performance was observed using the RAMOS[45] observation system. The data collection part of the project was limited to a pilot study.

Present plans are to expand the observation of student teachers, first in the area of elementary reading and subsequently to other subject areas. Again, RAMOS or a modified version of it is applicable. Additional variables such as environmental variables associated with the school and different teaching strategies used are to be considered. Data on student teacher performance are to be systematically collected and the relationship established between components (modules) of the CBTE program and the student teacher performance. This is program evaluation.

Program Validation — An Example. Of the two, evaluation and validation, program validation is the more difficult, from conceptualization through implementation. Nevertheless, the two types of research are not mutually exclusive. Program validation can take place in the same contexts as program evaluation. In the pilot project mentioned earlier, the APPLE[46] observation system (with appropriate modification) was used to observe pupil behavior. This system, parallel to the RAMOS, will be extended to reading and other areas. As the assessment levels of the Medley and Soars' model are increasingly removed from each other, it becomes increasingly difficult to establish the relationships and effects. Although difficult, it is not impossible with adequate design and field settings for conducting the research. This is the task of program validation.

Program evaluation and validation can be extended in a number of ways. Other areas than reading and mathematics can be included. Extension to various teaching levels can be considered. A variety of

45. Robert Calfee and Kathryn Calfee, Op. Cit.
46. Nadine M. Lambert and Carolyn S. Hartsough, Op. Cit.

instructional situations can be included. But, research of this type and magnitude has not traditionally been done in teacher education. It is not commonly supported in teacher education budgets. Therefore, external support through funded projects, or some other type of state level funding of teacher education is required.

Organization for Program Evaluation and Validation

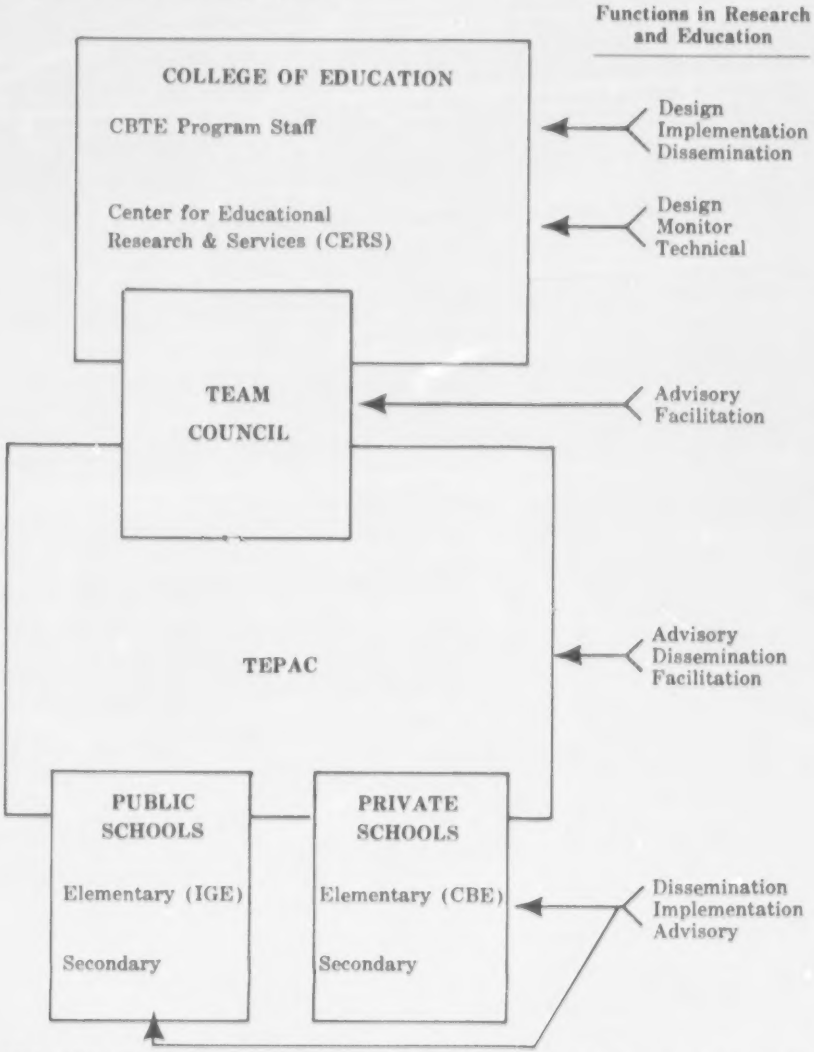
We recognize that a one-day planning meeting of 31 individuals is not going to produce detailed projects and designs for conducting program evaluation and validation. The February 14 meeting in Toledo did accomplish preliminary planning on how to organize for research and the kinds of studies to be done. Although the CBTE program at The University of Toledo is field-based and involves university, public school, private school and lay personnel, it should not be inferred that everyone involved will become a teacher education researcher. Many individuals are not so prepared nor do they have the time to become researchers. However, all individuals involved should be knowledgeable about and supportive of conducting the research.

The University of Toledo's CBTE program has a substantial field component throughout the four years of undergraduate education. The competencies of the program are demonstrated by the undergraduate student in elementary or secondary schools (as appropriate) with pupils. The student is required to attain satisfactory criteria on each instructional module. Teacher preparation so structured is considered continuous throughout the undergraduate training with a consistent transition to inservice education.

With the competency-based, field characteristics of the program, the college organization in which program evaluation and research are conducted includes The University of Toledo Teacher Education Policy and Advisory Committee (TEPAC). This committee of 46 members has representation from: (1) college administration, (2) CBTE teaching team leaders, (3) private and public school systems, (4) students and (5) lay citizens. The committee is advisory on procedures for implementing and operating the program. It has a dissemination function, and it is a major link between the college and the schools.

The relationships and overlaps between the schools, TEPAC, and the college are presented in Figure 4. These relationships, as indicated on the left side of the figure, outline the organization for implementing the CBTE program, and it, also, is the organization for research and evaluation in teacher education. The right side of the figure describes the functions of each component in conducting research and evaluation.

The characteristic of major importance in the organizational chart is the overlap between the components. No component is isolated from any other. For example, school personnel are represented on TEPAC, which contains the Team Council, consisting of college administrators and teaching staff.



ORGANIZATIONAL STRUCTURE AND FUNCTIONS OF THE COMPONENT FOR RESEARCH AND EVALUATION IN THE UNIVERSITY OF TOLEDO CBTE PROGRAM.

Figure 4

Relating components of an organizational structure is not sufficient for conducting research and evaluation. The members of the components must also know their functions and responsibilities. Functions must be realistic in terms of capabilities and resources. It is not efficient to attempt to have everyone engaging in all functions.

The functions as identified in Figure 4 are to a large extent self-explanatory. The implementation of research and evaluation consists of actually conducting the studies or projects. For example, implementation includes administering the necessary instructional treatments and data collection. Note that implementation is the function of the college staff and the school personnel in the program. College teaching staff also have a design function, along with CERS personnel. It is not expected that school personnel will make major contributions to design. However, they could have input to design through their advisory function, either directly or through their representatives on TEPAC.

CERS has the function of providing the technical assistance such as data analysis. Facilitation is a directly complementary function of implementation. It consists of activities, such as making arrangements, that enhance the implementation. No component that has implementation as a function has facilitation, because in those instances facilitation would be assumed within implementation. All functions are supportive of implementing the research and evaluation. Dissemination refers to that conducted within the organization as well as broader dissemination locally, and at state and national levels.

The organization of Figure 4 is not complex, yet it contains all of the necessary components for a field-based teacher education program. Assuming that design includes the formulation of research problems and hypotheses; all of the essential functions for successful research and evaluation are included. But, of course, success does not depend only on identifying functions. The functions must be adequately conducted in a cooperative and supportive manner. It will undoubtedly take a little time for the personnel in the various components to become proficient at this approach to research and evaluation. But, in any event, the planning has set the structure and identified the functions.

SYNTHESIS OF STATE PLANNING GROUP RESULTS

The five discussion groups that met on March 9-10 at the State Planning Group Meeting generated a plethora of ideas, with some

overlap between the results of the groups. The usefulness of these ideas is enhanced by synthesizing within the groups, and to some extent across the groups.

The matter of research and evaluation in teacher education considered in the Ohio context can be summarized in the answers to two general questions:

1. What is to be done?
2. How can we be organized to accomplish what is to be done?

To a large extent, four of the groups dealt with the first question and the fifth group with the second question.

Before considering specific planning results, we briefly review the Ohio context for research and evaluation in teacher education. There are 51 institutions of higher education in Ohio that prepare teachers for elementary and secondary schools. Private colleges outnumber state-supported universities 39 to 12; however, the universities have by far the larger enrollments. The private colleges generally tend not to be research oriented. Nevertheless, the private colleges are consumers of research results, and their lack of involvement in conducting research is a function of limited resources and opportunities, rather than a lack of interest. With a coordinated approach to research and evaluation, the private colleges should have increased opportunity for participation.

Teachers in the elementary and secondary schools work closely with teacher educators in some components of teacher education programs. Of necessity, some of the research and evaluation must take place in the field setting. Certain kinds of problems can be investigated better in the field setting. Any research that involves teaching effects or teacher effectiveness must not be construed as being an evaluation of teachers. Research studies will not be done from an individual accountability perspective. Evaluation will be directed to program evaluation with the objective of program improvement. Individuals will not be singled out for comparative purposes. Studies should not be personally threatening to any individuals participating in them.

The present status of teacher education research efforts in Ohio has been detailed in another section of this report. In brief, it is isolated and limited. Most research is centered in state supported universities. The proposals submitted for the Project 419, Phase II, Research and Development Program, reflected a general lack of sophistication in research problem definition. Many of the problems

were not well conceived, and most were short-range, single institution projects. There was general consensus among the planning group members that a statewide process and direction should be developed; that this process should not be one-shot, short-term in nature; and that the research and evaluation efforts should be coordinated, and to the extent possible, cooperative.

The "new" Ohio **Standards** for institutions preparing teachers have implications for research and evaluation. Moreover, national efforts in these areas are also relevant to the Ohio context. Therefore, it is not necessary for Ohio research and evaluation to begin at point zero. Efforts in Ohio should be related to national efforts as appropriate. Researchers in Ohio should know what is occurring in other parts of the United States, and Ohio should participate in interchange at the national level. In considering the Ohio context it can be concluded that there is definitely a need for research and evaluation in teacher education. The new state **Standards** have undoubtedly created heightened awareness of the need for research in teacher education. However, the **Standards** are not the only motivating forces. Research and evaluation directions and efforts at the national level have also focused the need more sharply. The present climate and mood in education in general, and in teacher education specifically, have produced a new awareness of the need for research and evaluation, for the purposes of understanding the process of education and using results for program improvement.

Needed Research and Evaluation

The discussions of the state planning meeting groups generated numerous research topics of various levels of specificity. Some topics are more amenable to research than others. Research topics or projects can be classified in many ways: by purpose, by methodology, etc. A classification system is important only to the extent that it is useful. We have decided to use a general methodology, classifying system for separating the various research problems identified. This system appears useful for a number of reasons. It cuts across universities, colleges, and school systems — necessary for any kind of cooperative approach. Secondly, it tends to pull together problems with similarities. Thirdly, it indicates the kind and level of information that can be brought to bear on a specific problem. (Many of the problems or topics can be tied in to specific Ohio standards.) Finally, the methodology system gives some indication of the sophistication of the research, and the kinds of resources and expertise required to successfully conduct the research.

Experimental Studies. Experimental studies are not limited to those in which there is direct manipulation of one or more independent variables, the traditional meaning of experiment. They include studies in which program or training effects are inferred from teaching situations, either real or simulated. In this context, there may be some deliberate manipulation of program factors, but some studies may simply involve programs as they exist. As a component of these studies, it will be necessary to develop or modify measuring instruments.

The suggested experimental studies focused primarily on "effects of" kinds of investigations. To some extent the studies have a continuing characteristic. That is, although studies should individually have identifiable outcomes at various points, they fit together as a composite in providing a continuous data base. The primary areas for experimental studies are:

1. Identifying effects operating within the teaching context: effects of program on teacher education students' behavior, and effects of teacher behavior on pupils.
2. Developing instruments necessary to measure the effects of (1) above.
3. Determining effects of exposure to multiple teaching environments, such as rural, suburban and inner city. Until 1980 some comparisons between groups of teacher education students who have and have not had such exposure can be made. The possibility of simulated training substituting for actual situations experience should be considered.
4. Identifying unique and common knowledge, diagnostic skills, competencies, etc., across the various teaching areas as identified by areas for certification.
5. Testing of two or more models for providing assistance to beginning teachers. (Models can be obtained from those presently existing and/or generated on an **a priori** basis.)

The experimental studies will require the most sophisticated measurement of the different kinds of studies. Also, the analysis metnodology will be more complex. Indeed, since research in the effects of teaching is entering a new phase which might be called an empirical phase, some of the methodology will need to be developed. Therefore, the experimental studies should be viewed as long-term endeavors which provide the data for program development and revision.

Survey Studies — Historical. All components of teacher education programs are not based on empirical results. This would be neither possible nor desirable. Some factors and procedures are based on value judgments and experience. Parts of the new standards reflect these values and experiences. A historical survey of certain prevailing, national conditions relevant to certain standards will be helpful in validating those standards. These studies will be descriptive in nature. They will consist of a limited number of historical investigations, that are relatively modest in magnitude.

Survey Studies — Cross Sectional. There is information potentially helpful for implementing the standards, that is not historical in nature, but can be obtained through survey methods with the data collection occurring at one time. As cross-sectional studies, data will be collected at a single time (within a specific study) from two or more sub-populations, programs, or program components. Attempts at inferring relationships retrospectively will be made from existing programs, etc., in this way identifying practices that can be retained and others that are deficient in meeting the **Standards.**

The primary areas for cross-sectional studies are:

1. Identifying criteria for program entry and retention in programs for teacher education. Common and unique criteria of programs across both institutions and levels should be considered. Meeting criteria should be related to the apparent success of students in persisting in teacher education programs.
2. Description of the utilization of facilities specifically mentioned in the **Standards.**
3. The identification of commonalities of course content and field experiences, thus more specifically identifying the relationship, or lack of it, between theory and practice.
4. Description of the contractual arrangements that presently exist in teacher education programs. These arrangements include those between universities or colleges and school systems or teacher groups, that participate in teacher education. To a lesser extent, contractual arrangements among students and the universities, or other groups of individuals may also be included. Along with the description, information on the acceptability of the arrangements and their potential for meeting the standards should also be obtained.

Survey Studies — Longitudinal. Longitudinal studies are those in which data are collected at two or more points in time, from one or

more groups (usually more). In this way change within the group can be studied. There are, of course, different types of longitudinal studies such as trend, cohort, and panel studies. In this discussion we are concerned with the problem areas not the detailed designs.

Implementation of the **Standards** has an extended timetable, and correspondingly research in teacher education should be viewed as long-range. Indeed, it is important that research and evaluation in teacher education take on the characteristic of a continuing, dynamic process. In this way teacher education can become a discipline which is revised and improved in the context of a timely data base. Longitudinal studies have considerable merit in helping understand the kinds of changes that take place. For this reason they are considered second only to the experimental studies in importance.

The primary areas for longitudinal studies are:

1. Survey of the perceived (and actual) roles and responsibilities of school boards, citizens, private educational agencies, educational associations, and other parts of the educational community in teacher education. Correspondence between perceived, actual, and desirable roles can be studied over time, to determine discrepencies and trends.

2. Survey of the characteristics and the change in characteristics of teachers who work with teacher education students in field experiences.

3. Survey of the success of graduates during their early years of teaching, possibly three to five years into the profession.

4. Survey of the persistence of high school graduates interested in teacher education, and identification of those characteristics common to those who successfully enter a teacher education program.

Cost Analysis Studies. Due to a combination of factors, there is renewed interest in obtaining objective and reliable cost information. There are two basic studies of this type especially relevant to teacher education:

1. Study of the cost required to implement the new **Standards** in universities and colleges. Part of this might be done by simulated models, probably computer generated, and part of the study could be based on the costs of implementing actual components that meet the **Standards**.

2. Studies of procedures for tracking the costs of various "items" or components. The anticipated outcomes would be a more refined system of coding and cost determination across universities and colleges.

The cost analysis studies may not appear to be as "academic" or professional an area for evaluation and research as some of the other areas. Nevertheless, they have an important role in the implementation of the new Ohio **Standards**.

Model Building Studies. Evaluation and research in any discipline or profession can run the continuum from simple to sophisticated. Teacher education is no exception, although in the past there has been a persistence in staying on the simple end. But instruction and teacher education are relatively complex areas. All of the studies necessary cannot simply be identified and readily completed with an existing methodology. Some model building will be necessary, and, correspondingly, there will need to be developed some evaluation methodology; or at least existing methodologies will need to be adapted.

Problems or projects for which model building is required are:

1. The development of feedback models for program revision. This could involve feedback of program operation, feedback from students in the program, and feedback on the "success" of graduates.

2. The development of staff structures among universities or colleges, and other agencies involved in preservice or inservice teacher education. An example might be the use of joint appointments between universities and teacher centers.

3. The development of models for colleges and universities to provide assistance to teachers during their early years in the teaching profession. There are few models available, and expansion is in order.

The model building studies would overlap some with studies classified under the other methodologies. In fact, model building, of itself, is not a methodology. It is the conceptual development upon which a course of action is based. That course of action would commonly go through a developmental phase before entering an implementation phase. Model building has at times not been given adequate attention in teacher education research and evaluation. Studies have been undertaken in what appears to be an atheoretical

context, with but little utilitarian rationale, or possibly an outdated rationale. An organized approach to research and evaluation should reduce the number of such futile studies.

Coordinating and Funding Research and Evaluation in Ohio

At the State Planning Meeting, Group IV discussed this topic in detail. The group had broad representation from the educational community — schools, colleges, universities, and a private foundation interested in educational projects. The consensus of the group was that there is a need for coordinating and funding research and evaluation activities in Ohio, and that this need should be met through some new type of structure or organization.

There was no disagreement about the rationale for an organization to coordinate research and evaluation efforts in teacher education. Clearly, the efforts at the national level have implications for Ohio, and Ohio can definitely benefit by participation in such efforts. There is a need for evaluation related to the Ohio **Standards**. At another level there is need for research in a continuing validation of the **Standards**.

It has already been noted that research presently in progress is practically limited to the state-supported universities. Yet the **Standards** require increased field activities and more extensive cooperation between universities (colleges) and school systems. This implies increased, cooperative activities, not only in identifying research problems, but in conducting research and evaluation as well. Such cooperation is not going to come about without concentrated effort. A state organization can certainly facilitate such cooperation.

The group at the State Planning Meeting used the local university advisory committees, which are required by the **Standards**, as a beginning point for representation. Such advisory committees are probably for the most part, not yet formed. The idea was to use selected members of the advisory committees as representatives on the state research and evaluation organization. It was suggested that the state be divided into five geographical regions and that representation be obtained from school administrators, teachers, parents, universities, and colleges, from all regions. Not only does this approach create an excessively large group, but it is overloaded with non-researchers. Another difficulty encountered was developing a process by which individuals gained membership on this "state coordinating committee." A lottery system was suggested, although it was not considered satisfactory since acquiring necessary research expertise on the committee would be left to chance. The planning time at the meeting

expired before all problems were resolved, but neverthelss, the group did provide valuable input for the executive committee.

Representation on an Advisory Board. At the executive committee meeting a compromise was developed to resolve the paradox described above. Essentially, the compromise sacrificed some of the broad representation in order to obtain the necessary research expertise. The size of the proposed research and evaluation organization was reduced from around 30 to approximately 16-18 members. Procedures were developed for agencies, universities, etc. to be represented.

In order to facilitate communication, the organization would be called a "Coordinating Board for Research and Evaluation in Teacher Education." (It will be referred to as the Board in the remainder of this document.) The executive committee reduced the number of regions for Ohio from five tc four, using the four telephone area code boundaries as the boundaries for the regions. The representation of the Board was then designated as follows:

1. Four representatives from private colleges — one from each region.
2. Eight representatives from state universities, two from each region.
3. Four representatives from the public schools — one from each region.
4. One representative from the Ohio Department of Education.

The colleges and universities have their own state level boards or organizations, and appointments to the Board will be made through these organizations. The organization for the private colleges is the Executive Committee of the Ohio Association of Private Colleges for Teacher Education. This committee has already met and designated their four appointees. The state university organization is the University Deans of Colleges of Education. The University Deans (following the example of the private colleges group) can develop their own procedures for appointment. However, there should not be more than one representative from a single college or university.

The representatives of the public schools and the Ohio Department of Education representative would be appointed by the State of Ohio Department of Education through the superintendent's office. However, the recommendations for appointment would be formulated in the Division of Planning and Evaluation. The Department repre-

sentative would likely be a member of this Division, possibly its director.

The major qualifications for appointment to the Board is the mastery of research skills and experience as a practicing researcher, in areas related to teacher education. All other considerations are secondary to these qualifications.

The matter of representation of the Ohio Board of Regents (OBOR) and of the Ohio Legislature was also discussed. It was decided that the OBOR should be invited to send an observer to the meetings of the Board. The relationship with the Ohio Legislature was left open for one or both of the following options: (1) invite one or more chairpersons of the relevant committee(s) to be observers, or (2) appoint one member of the Board to be a direct liaison with the Legislature. This appointment would be made internally by the Board after it is formulated. The latter option is probably the most desirable because, due to time constraints, it may be difficult for chairpersons to serve effectively as observers.

Functions of the Board. The Coordinating Board for R and E in Teacher Education would presumably coordinate research efforts, but this needs to be defined. Coordinate implies some kind of bringing together and organizing; however, in this context it comprises a number of functions.

The past status of teacher education in Ohio (and throughout the United States) has been one of little research and program evaluation effort. The quantity of such effort would hardly merit coordination. However, with recent developments, especially the implementation of the **Standards**, and the national concern with the quality of preservice and inservice teacher training, research and evaluation does merit coordination and organization.

One function or group of related functions, of the Board would be to serve as an advisory body to the teacher education profession. The Board would serve as advisory on: (1) the sources and amounts of funding for R and E, (2) the priorities of research problems, and (3) the creation of research project teams that could most effectively work on certain problems.

A function which is somewhat advisory would be to develop guidelines and criteria for proposed R and E projects to be funded from Teacher Education Redesign funds. The Project 419 proposals,

submitted in the fall of 1976 under the R and D program, had a number of problems as follows:[47]

1. They tended to be more developmental in nature than research and evaluation.
2. Many were very poorly conceptualized and failed to take into consideration the results of studies dealing with the same or similar problems.
3. Research questions and methodologies tended to be naive, superficial, and inadequate.

Substantive teacher education research in Ohio requires the correction of the deficiencies listed above. Assuming the qualifications for membership on the Board are met, the Board could serve to correct deficiencies. There is little point in persisting with the review of inadequate proposals without giving the proposal writers direction about what is needed, required, and expected. The Ohio Department of Education has taken this type of direction in the Title-IVC Program, in which requests for proposals (RFPs) have been developed for specific, identified need areas, and required proposal components are specified. An example of the latter is the requirement of quantitative, student data in establishing the local need. Proposals are then reviewed in detail with appropriate feedback to the proposal developer.

There is little doubt that proposal development in teacher education R and E could benefit enormously from an approach similar to the one described above. The Board could function in this capacity. Subcommittees of the Board could be formed to work on various tasks such as needs area specification and guideline development. The Board could also assume some of the responsibility of proposal review, and for proposal submission under any state programs as long as the proposals relate to R and E in teacher education.

There has been a persistence among funding agencies, both national and state level, to fund relatively isolated projects in many cases involving only one or a limited number of researchers. This may have been due to the fact that the "go-it-alone" model is the one insisted upon by proposal developers. Indeed, many agencies have expressed interest in cooperative projects, but if such projects are not developed there is little that can be done about funding them. There have been successful attempts at organizing and conducting such

47. These are assessments expressed by Project 419 personnel who served on review panels for the research and development program proposals.

projects.[48] One function of the Board would be to facilitate the development of cooperative R and E projects.

The facilitating of the development of cooperative R and E projects involves a variety of functions. One is an initial dissemination function of informing the teacher education profession about possible sources of joint funding, and the types of projects that can be conducted cooperatively. Secondly, there is the function of developing a process by which proposals can be jointly prepared, reviewed (if possible), and submitted for funding. The Board would participate in proposal development as appropriate. Thirdly, there is the function of actual participation in the project by members of the Board. It might be possible that a committee of the Board could serve as project monitor. Serving as monitors of all possible projects in R and E would not be a desirable function of the Board, because it would soon become too demanding. However, for cooperative, reasonably large-scale projects, monitoring a project might well be a desirable function. Finally, the Board would serve a dissemination function to the profession as projects are in process and are completed.

The activities of the National Commission for Performance Based Education are examples of cooperative efforts which include R and E in teacher education. The commission has recognized the resources and efforts necessary for cooperative activity at the national level. Despite these concerns, the combined approach appears to be the most effective approach for getting the necessary jobs done. Past educational research results generally, and those in teacher education specifically, have not been extremely useful in solving the problems of education. Possibly the combined approach may in the long run be the only successful approach for major impact — or any impact — on education's problems. Therefore, this approach merits consideration and implementation.

Dissemination has been mentioned as a Board function in connection with cooperative projects. But the Board would have a broader dissemination function of informing the profession of its activities and the results of R and E in teacher education. This would be done through a periodic publication, possibly a newsletter or a more

48. An example is the University of Wisconsin/Sears, Roebuck Foundation, Teacher Education Project. This project which extended over a period of some three years involved scores of individuals from universities, school systems, private concerns, and state departments of education. A commercial publisher was involved as were several materials development firms. The project was funded by a private foundation in excess of 1.3 million dollars. The project has been successfully brought to closure with all project objectives attained.

extensive publication. The frequency and extent of this publication would depend upon the amount of activity and output.

In summary, the Board would have a variety of functions. Some of these would be advisory, but serving in this capacity would not be the major activity. Coordination and facilitation of R and E as described above would be the central functions. Dissemination of information about prospective projects, activities, and results would also be a Board function.

Summary of State Planning

The five groups at the State Planning Meeting discussed a wide variety of topics related to research and evaluation in teacher education. There was enthusiastic and comprehensive participation in the discussions. All participants had opportunity to make their contributions and present their ideas. There were several tangible outcomes of the State Planning Group meeting.

One outcome was the increased awareness of R and E in teacher education, and its potential effects on the future redesign of teacher education in Ohio. Participants from all sectors of the education profession were involved. For many participants, the meeting was very informative, especially about research on teacher education nationally and the possible effects of such research on teacher education in Ohio. The meeting also provided the opportunity for some participants who do not often have opportunity to do so to participate in discussions on research.

A second outcome was the identification, classification, organization, and prioritization of needed and desirable research and evaluation for Ohio. (These research and evaluation topics have been identified and listed in the group reports appearing in Chapter 4. A summation of them also appears in the Appendix.) The exercise of sorting the ideas, etc., is a necessary step to getting a cooperative and coordinated effort under way. But except for an increased level of awareness about research and evaluation, this exercise of itself does not generate research results. Therefore, a third and final outcome would be necessary.

This final outcome was a plan of action for initiating and conducting useful research and evaluation. That plan of action was suggested through the definition of the composition and functions of the Coordinating Board for Research and Evaluation in Teacher Education. This would be a state level board, with all the concerned elements of

the education profession represented. The planning effort has brought us to the formation of the Board, which is as far as planning can go. It has brought us to the threshhold of implementation. The planning effort has generated definite implications for implementation already discussed in earlier chapters.

THE "BOTTOM LINE"

The specificity of planning is always a matter of degree. It would be easy to criticize this planning project for not generating more specific projects. That was not its purpose. Its purpose focused on the broader areas of identifying research and evaluation problems for teacher education, and developing a structure by which such problems can be attacked. To that end the planning project has met its purpose.

Many plans in education are never implemented for a variety of reasons. Possibly the funds and resources are not forthcoming, or the necessary cooperation cannot be obtained or maintained. In some cases essential components do not assume their responsibilities. It was clearly evidenced through this planning project that research and evaluation in teacher education is a cooperative effort among colleges, universities, schools, teachers organizations, the State Department of Education. Other government agencies and possibly private foundations may be involved. As any component neglects its responsibility or fails to support research and evaluation in teacher education, the entire effort is weakened. The functions of each component are quite clear from the planning. Everyone is not going to be a researcher and/or evaluator but everyone has an active role in supporting, facilitating, or conducting research and evaluation.

The point is emphasized throughout this monograph that research and evaluation are cooperative endeavors. They must be exactly so in order to generate useful results. Success also depends on a supportive balance between theory and practice. It is therefore fitting that the concluding statement of this report be a recent quote on the very essence of success in educational research (and evaluation):

> If there is a principle of success emerging, it is that researchers themselves must be able to bridge the gap between research and practice. . . . . the most effective researchers and the most profound observers in education — those who have had the greatest positive impact — have been able to live in the two worlds of research and schools. Such

individuals must be committed to schools as they are and be able to understand the daily problems of people who work there, while at the same time being able to analyze and envision how the schools could be made better.[49]

49. David Savage, "The Passing of An Administrator, PHI DELTA KAPPAN, 58 (June 1977) 787.

Appendix

POSITION PAPERS

SOME CONSIDERATIONS ON RESEARCH AND EVALUATION IN TEACHER EDUCATION

Teacher education has its full share of critics, ranging from critics of specific program components to those who have a criticism of education in general. Within recent years the general concern with accountability in education has provided additional firepower for the critics, with little constructive action from the teacher education community.

A basic concern has emerged (actually it has always been present) which, in its simplist stated form, is the relationship between teachers' performance and behavior and pupils' behavior and outcomes. We know that teaching performance is a function of teachers' backgrounds, knowledge, attitudes and aptitudes. We think that pupils' learning, behavior, attitudes and achievement has something (probably a great deal) to do with teaching performance. More and more there is general public interest, even a demand, to discover if what teachers do in classrooms results in positive behavior and increased learning for children. For example, Cruickshank and Kennedy at The Ohio State University have stated that an " . . . overriding objective—to relate patterns of teaching behaviors to student outcomes—addresses one of the most crucial research problems in teacher education today.[1] Such concern can be labeled "The Evaluation and/or Research of Teacher Education Effectiveness.

Research on teacher education effectiveness is hampered by a number of factors, one of which is the misconception of the "layman" about the complexity of the research area. The uninformed tend to see solutions to problems as much more simplistic than they really are. Berliner[2] has provided what is undoubtedly the most comprehensive summary of problems in this area. He identifies a number of impediments to the study of teacher education. However, we must be careful not to misinterpret Berliner's remarks. He does **not** say that research and evaluation in this area is impossible. He does say that it is

1. Donald R. Cruickshank and John J. Kennedy, "Research in Teacher Education," JOURNAL OF TEACHER EDUCATION 28 (Winter 1976): 315.
2. David C. Berliner, "Impediments to the Study of Teacher Effectiveness," JOURNAL OF TEACHER EDUCATION 27 (Spring 1976): 5-13.

difficult and that people both within and outside the profession should stop viewing such research and evaluation problems as simple and should stop searching for short-range solutions.

It is not necessary to review Berliner's listing of impediments to teacher effectiveness research here but sufficient to identify an example. One of the past difficulties with research in the area has been with persistent use of univariate, dependent variables, when in fact the real life situation in the schools is one of multivariate outcomes. Peck arrives at the same conclusion when he states:

> ". . . what is needed is research that reasonably reflects the multivariate nature of real-life learning and the interacting effects of teacher and learner characteristics as they affect important outcomes of education."[3]

Technically, doing research with multivariate outcomes is more sophisticated than when dealing with single dependent variables. But the major difficulty in the past has not been the added sophistication, but the persistence in attempting to research teaching as something different than it is. The first step in conducting research is getting off in the right direction, identifying the research problem for what it really is. With recent contributions, not only of writers such as Berliner and Peck, but contributions from operational research studies,[4] a reasonable and useful context for teacher education effectiveness research has been developed.

Along with the recent attention to teacher education nationally, a number of somewhat independent events or phenomena have been taking place that have definite, long-range implications for teacher education. One has been the "compe-

3. Robert F. Peck, "Needed R and D in Teaching," JOURNAL OF TEACHER EDUCATION 27 (Spring 1976): 18.

4. See for example reports on Phase II of the Beginning Teacher Evaluation Study, conducted by the California Commission on Teacher Preparation and Licensing and supported by the National Institute of Education. Section on **Research in Teacher Education**, JOURNAL OF TEACHER EDUCATION 27 (Winter 1976): 315-339.

tency-based education" movement with its pros and cons. This movement has resulted in various courses of action, whose effects will be around for some time. One result was the forming of a National Commission for Performance-Based Education. The Commission has undertaken the task of generating organized research efforts, on state and national levels, on the nature and effects of teacher performance and effectiveness. One aspect of these efforts is the matter of research in competency-based teacher education.

Another effort, which is generally identified as a "reform" effort, is Teacher Education Redesign, the development (and subsequent implementation) of the "new" **Standards for Colleges or Universities Preparing Teachers in the State of Ohio.** Clearly, many of these standards are not researchable; those that deal with policy, facilities, and staffing, for example. However, other standards that deal with the training and performance of teacher education students have strong implications for evaluation. In this context research and evaluation are closely related. Research may deal at a slightly more general level in that if effects are found, research does not necessarily place a value judgment on their desirability or undesirability. In most operational teacher education programs such judgments are certain to follow.

The Following Was Added to the Position Paper Sent to the Executive Committee for the Project

Focusing more closely on the task at hand and projecting the context described above onto the Ohio teacher education scene, it is reasonable (and many people would argue essential) that research and evaluation be given adequate attention. One approach would be to allow isolated projects to develop and conclude wherever they do on an **ad hoc** basis. This has been the usual procedure. We can continue to commit the error of fractionating teacher education evaluation and research so that an inaccurate picture of reality is obtained, just as one of the errors Berliner has identified is fractionating student learning into pieces that do not resemble the students' view of reality. A more fruitful approach would seem to be a unified effort based on systematic planning which includes the various concerned components of the profession. To that end we are conducting a plan-

ning project sponsored and funded by the Ohio Department of Education and the National Commission for Performance-Based Education.

The planning project has an executive committee which has the task of conducting a one-and-one-half day meeting of a State Planning Group (SPG). The executive committee for the project consists of the following:

1. Dr. G. E. Dickson, Project Co-Director.
2. Dr. William Wiersma, Jr., Project Co-Director.
3. Mr. Dal Lawrence, President of the Toledo Federation of Teachers.
4. Dr. Edward Jirik, Ohio Education Association.
5. Dr. Patricia Mills, Representative of Ohio Department of Education and Project 419.
6. Dr. Roger Iddings, Representative of the State University Education Deans.
7. A representative of the Ohio Teacher Education Certification and Advisory Committee.
8. A representative of the executive committee of the private colleges for teacher education.

The SPG will consist of approximately 43 participants including the eight members of the executive committee. For the most part, these 42 participants will come from the same kinds of agencies and institutions as the members of the executive committee. In addition, there will be participants from school systems cooperating with universities in their teacher education programs, and one representative from an Ohio private foundation.

The specific objectives for the two-day meeting (February 2 and 3, 1977) of the executive committee are:

1. to determine the extent of information dissemination necessary prior to the meeting of the SPG and during the early part of the meeting; this involves specific materials to be disseminated and the specific presentations and their content to be given in the meeting.

2. to identify the specific subgroups of the SPG to be formed for planning during the SPG meeting; this includes identifying institutional representation in the subgroups, subgroup chairpersons, and subgroup membership.
3. to develop a description of the products anticipated from the planning meeting.
4. to produce a detailed agenda for the SPG meeting.
5. to reach a general consensus on the overall approach to research and evaluation that may be feasible with the SPG.

* * * * *

The Following Was Added to the Position Paper Sent to the Local Planning Group Meeting Participants

What does all this mean for The University of Toledo College of Education and the task at hand? From the Teacher Education Redesign effort, the College has received a grant to continue the development of an evaluation component for its teacher education program. This project involves a pilot study of conducting classroom observation on student teachers teaching elementary mathematics. But one pilot study does not develop an evaluation component, nor is it likely to generate many conclusive research results. Therefore, it is important that the College efforts be viewed as long-term, and that they be coordinated with evaluation and research efforts taking place at the national level.

In order to take a long-term, coordinated approach, two things are presently happening. First, the observation procedures used in the pilot study involve instruments that have been used in other national studies. These instruments used in the California Beginning Teacher Evaluation Study are Reading and Mathematics Observation System (RAMOS) and Anecdotal Processing to Promote Learning Experiences (APPLE).[5] Thus, the evaluation project at UT is not a project isolated from other research and evaluation efforts in teacher education.

Second, the College has obtained a planning grant jointly funded by the NCPBE and the State of Ohio Department of Education. One purpose of the planning project is to conduct planning on a statewide basis for research and evaluation in teacher education for Ohio. The second purpose of the project, and the one specifically concerning the group to which this paper is addressed, is "to plan the long-range

5. For descriptions of these instruments, the reader is referred to Nadine M. Lambert, "APPLE Observation Variables as Measures of Teacher Performance," and Robert and Kathryn Calfee, "RAMOS: Description and Measurement of Time Usage in the Classroom" both in the JOURNAL OF TEACHER EDUCATION 27, No. 4, (Winter 1976): 320-325.

evaluation and supportive research for the UT teacher education program."

The special planning group, meeting February 14, consists of the following:

1. Twelve representatives from the Teacher Education Policy and Advisory Committee (TEPAC) of The University of Toledo. (One representative from each of eleven school systems and a lay representative.)
2. Eleven UT project staff of the evaluation project involving the pilot study.
3. Members of the executive committee of the planning project, six members in addition to those included in (2) above.
4. Limited number (4) selected observers from the college and school systems.

The planning group represents all sectors of professional education concerned with teacher education at The University of Toledo College of Education, the school systems, the Ohio Department of Education, and the teacher organizations.

The agenda for the one-day planning meeting is descriptive of the procedures for the meeting. One result of the meeting should be that members of the planning group will be better informed about evaluation efforts at UT, especially those connected with the pilot study. The anticipated outcome or product of the meeting is a general plan for continued evaluation and research.

* * * * *

The Following Was Added to the Position Paper Sent to the State Planning Group Meeting Participants

Focusing more closely on the task at hand and projecting the context described above onto the Ohio teacher education scene, it is reasonable (and many people would argue essential) that research and evaluation be given adequate attention. One approach would be to allow isolated projects to develop and conclude wherever they do on an **ad hoc** basis. This has been the usual procedure. We can continue to commit the error of fractionating teacher education evaluation and research so that an inaccurate picture of reality is obtained, just as one of the errors Berliner has identified is fractionating

student learning into pieces that do not resemble the students' view of reality. A more fruitful approach would seem to be a unified effort based on systematic planning which includes the various concerned components of the profession. To that end we are conducting a planning project sponsored and funded by the Ohio Department of Education and the National Commission for Performance-Based Education.

The planning project has an executive committee which has planned the one-and-one-half-day meeting of the State Planning Group (SPG). The executive committee for the project consists of the following:

1. Dr. G. E. Dickson, Project Co-Director.
2. Dr. William Wiersma, Jr., Project Co-Director.
3. Mr. Dal Lawrence, President of the Toledo Federation of Teachers.
4. Dr. Edward Jirik, Ohio Education Association.
5. Dr. Patricia Mills, Representative of Ohio Department of Education and Project 419.
6. Dr. Roger Iddings, Representative of the State University Education Deans.
7. Ms. Carol Matthews, Representative of the Ohio Teacher Education Certification and Advisory Committee.
8. Dr. Chester Addington, Representative of the Executive Committee of the Association of Private Colleges for Teacher Education in Ohio.

The SPG will consist of approximately 50 participants including the eight members of the executive committee. For the most part, these 50 participants will come from the same kinds of agencies and institutions as the members of the executive committee. In addition, there will be participants from school systems cooperating with universities in their teacher education programs, and representatives from Ohio private foundations.

The agenda for the two-day SPG meeting is tightly organized and descriptive of the procedures for the meeting. It is anticipated that considerable planning progress will be made on the topics indicated, enough so that the SPG will generate at least one detailed plan (possibly more than one) with priorities and a description of activ-

ities for continued teacher education, evaluation and research in Ohio. It is hoped that some progress will be made in seeking foundation support for these efforts. A planning report will be prepared by the executive committee which will be circulated among the members of the SPG. A final report will be submitted to the State of Ohio Department of Education and the National Commission for Performance-Based Education at the close of the planning project, May 31, 1977.

* * * * *

The Following Was Added to the Position Paper Sent to Ohio Foundations[1]

We have mentioned the Ohio Teacher Education Redesign Effort. One project related to that effort is a planning project which has a purpose, "to conduct planning on a statewide basis for research and evaluation in teacher education for Ohio." The project is jointly funded by the NCPBE and the Ohio Department of Education. Although the grant for the planning project was obtained through the College of Education of The University of Toledo, it is a project that involves statewide representation of all sectors of the education profession concerned with teacher education.

The planning project has an executive committee which has planned a one-and-one-half-day meeting of a State Planning Group (SPG) to be held in Columbus, March 9-10, 1977. The executive committee for the project consists of the following:

1. Dr. G. E. Dickson, Project Co-Director.
2. Dr. William Wiersma, Jr., Project Co-Director.
3. Mr. Dal Lawrence, President of the Toledo Federation of Teachers.
4. Dr. Edward Jirik, Ohio Education Association.
5. Dr. Patricia Mills, Representative of Ohio Department of Education and Project 419.
6. Dr. Roger Iddings, Representative of the State University Education Deans.

---

1. The title of this position paper was slightly different than the title of the others. It was, "Some Considerations on Foundation Support of Research and Evaluation in Teacher Education."

7. Ms. Carol Matthews, Representative of the Ohio Teacher Education Certification and Advisory Committee.

8. Dr. Chester Addington, Representative of the Executive Committee of the Association of Private Colleges for Teacher Education in Ohio.

The SPG will consist of approximately 50 participants including the eight members of the executive committee. For the most part, these 50 participants will come from the same kinds of agencies and institutions as the members of the executive committee. In addition, there will be participants from school systems cooperating with universities in their teacher education programs, and representatives from Ohio private foundations.

The question might be raised, "What does all this have to do with private foundations?" Clearly, many foundations have interests in higher education projects and activities. These interests cover a variety of possibilities, and often among the possibilities are research and evaluation projects. The State of Ohio and the universities and colleges preparing teachers have spent and are spending considerable funds on teacher education. But most of these funds go into program development and operation, and little money is left for research and evaluation. Therefore, private foundations can serve a very important function in supporting research and evaluation in teacher education.

An initial reaction might be that teacher education research and evaluation has little organization, and that supportive costs would be prohibitive. Whereas such a situation might have been the case a few years ago, present efforts in Ohio and nationally, have changed the situation. There are approximately 40 private colleges in Ohio, plus the 12 state-supported universities, that prepare teachers for elementary and secondary schools. These institutions of higher education, along with their cooperating school systems have been brought together under the umbrella of Teacher Education Redesign. Indeed, one of the long-range purposes of the planning project is to provide a structure for a coordinated research and evaluation effort.

Ohio is not alone in the business of preparing teachers or attempting to improve teacher education. Earlier we alluded to projects and activities at the national level including the formation of the NCPBE. In fact, the NCPBE has formed a loose consortium of eight states which are involved in planning grants within the

states, and in some cases initiating beginning studies in research and evaluation. (The University of Toledo has also begun a pilot project in evaluating its competency-based teacher education program, the project being funded by the Ohio Department of Education, Project 419, Phase II grants.) The University of Toledo has exercised the leadership for Ohio in participating in the eight-state consortium. Thus, there is a tie-in with efforts at the national level.

The support necessary within Ohio is of two types: (1) support for an organization to extend planning and coordination of research and evaluation in teacher education, and (2) support for projects in research and evaluation. There are a number of possible sources for the latter at local, state, and national levels (including private foundations), but private foundations are the only viable source for supporting a state organization for research and evaluation, and this is where we want to focus attention presently. We want to explore with one or more foundations the possibility of supporting such an organization for a three to five year initial period.

The financial support required for such an organization will not be extensive, possibly in the $20,000-$30,000 per year range. The details of such an organization and its specific functions have not been developed. One of the work groups at the March 9-10 meeting will consider these specific matters. That group will meet for a period of four and one-half hours. It will have approximately ten participants with broad representation from the education profession. Specifically, the topic for that work group is: "Coordinating and Funding (Teacher Education) Research and Evaluation Efforts in Ohio."

It is with this group that we encourage the participants from foundations to meet. Hopefully progress will be made in developing plans and generating foundation interest. Of course, any funding will be based on a specific, written, acceptable proposal according to the foundation(s) guidelines.

MEETING TOPICS AND QUESTIONS

I. **Teacher Education Research and Evaluation in Ohio and Its Congruence with National Teacher Education Research and Evaluation**

(1) What are the research and evaluation parameters that exist in Ohio?

(2) What is the relationship of Ohio teacher education research and evaluation to national research efforts in this field?

(3) What are the general research and evaluation directions in teacher education that need to be addressed in Ohio?

(4) Is there a need for a "coordinated" approach to research and evaluation in Ohio?

(5) What specific research and evaluation is needed in Ohio to provide better congruence with such research and evaluation effort nationally?

(6) What teacher education research questions need better definition in Ohio to bring them in line with national concerns?

II. **Teacher Education Research and Evaluation Implied and Needed for the Consideration and Validation of the New State Standards for Colleges or Universities Preparing Teachers**

(1) What is the potential for research and evaluation support under the "New State Standards?"

(2) What are the existing parameters for research and evaluation suggested by the "New State Standards?"

(3) Which standards need research and evaluation effort?

(4) What are the researchable questions suggested by the "New State Standards?"

(5) What is the broad design of the research and evaluation effort necessary to validate the "New State Standards?"

(6) What are the research and evaluation priorities under the "New State Standards?"

(7) Is a coordinated approach necessary for considering research and evaluation under the "New State Standards?"

(8) What general research and evaluation directions are needed and dictated by the highly increased emphasis on student field experiences in the "New State Standards?"

(9) What are the relationships between entry—exit—one-year-or-more removed characteristics for teacher education students and graduates in terms of research and/or evaluation?

III. **Teacher Education Research and Evaluation Desired by Separate Sectors of the Professional Education Community (State Universities, Private Universities and Colleges, The State Department of Education, and Schools (teachers and school administrators)**

(1) What are the potentials for research and evaluation among the various sectors of the professional education community?

(2) What are the general research and evaluation directions in teacher education that need to be addressed — i.e., urban, rural and suburban environments?

(3) What are the research problems that should be addressed by various sectors of the professional education community?

(4) What are the evaluation problems that should be addressed by various sectors of the professional education community?

(5) How can program effectiveness be improved through research and evaluation considerations in teacher education?

(6) What research and evaluation in teacher education is needed on the topics—the teacher as a professional, as a person, and as a scholar?

(7) Is there any research and evaluation policy needed among the various sectors of the professional education community?

(8) What is the potential support for research and evaluation in the professional education community?

IV. **Coordinating and Funding Research and Evaluation Efforts in Ohio**

(1) What is the potential for supporting research and evaluation?

(2) What are the priorities for research and evaluation?

(3) What are the general research directions which need to be addressed?

(4) How does one define research questions?

(5) What is the most effective approach to a research and evaluation program in Ohio?

(6) Is there need for a "coordinated" approach to research and evaluation in Ohio?

(7) What cost effectiveness considerations need to be considered in R and E efforts?

PARTICIPANTS ATTENDING THE LOCAL PLANNING GROUP MEETING

February 14, 1977

Members of the Project Steering Committee

Dr. Chester Addington
Dr. George E. Dickson
Dr. Roger Iddings
Dr. Edward Jirik
Mr. Dal Lawrence
Ms. Carol Matthews
Dr. Patricia Mills
Dr. William Wiersma, Jr.

The University of Toledo College of Education Staff

Dr. Reemt Baumann
Dr. Donald Beckwith
Dr. William Cox
Dr. Peter Dewitz
Dr. Clyde Dilley
Dr. Thomas Dunn
Dr. Thomas Gibney
Dr. Richard Ishler
Dr. Stephen Jurs

Invited Observers

Ms. Katherine Eby, Toledo Public Schools
Ms. Julie Hess, Toledo Federation of Teachers
Dr. Joan Inglis—The University of Toledo College of Education
Dr. Leo Leonard—The University of Toledo College of Education

TEPAC Representatives

Bedford Public Schools	— Ms. Jacklyn Dreps
Maumee City Schools	— Mr. William Moritz
Ottawa Hills Public Schools	— Ms. Barbara Wagner

Perrysburg City Schools	— Mr. Paul Kimmelman
Rossford Public Schools	— Mr. Gene Barrett
Springfield Local Schools	— Mr. Ralph Carroll
Sylvania City Schools	— Mr. Earl Heath
Toledo Diocesan Schools	— Sister Mary Lawrence Wilson
Toledo Public Schools	— Ms. Nanci Lucas
Lay Representative	— Ms. Barbara Wolfe

PARTICIPANTS ATTENDING THE STATE PLANNING GROUP MEETING

March 9-10, 1977

Dr. Chester Addington
Department of Education
Otterbein College

Dr. Betty Armstrong
College of Education
University of Cincinnati

Dr. Roy M. Bacon
Heidelberg University

Mrs. D. Jeanne Bodine
Akron City Schools

Dr. G. Robert Bowers
Ohio Department of Education

Mr. Kenneth E. Cardinal
Kent City Schools

Mrs. Mabel Childers
Trotwood-Madison City Schools

Dr. Frederick J. Cyphert
College of Education
Ohio State University

Dr. George E. Dickson
College of Education
The University of Toledo

Mr. David Enderle
Wooster City Schools

Dr. Bernard Esporite
College of Education
The University of Akron

Dr. James H. Fry
Xavier University

Dr. Thomas Gibney
College of Education
The University of Toledo

Dr. Kenneth Glass
College of Education
Miami University

Dr. Paul Hailey
Ohio Department of Education

Mr. Ronald W. Handy
Cleveland Board of Education

Dr. William E. Harrington
College of Education
Bowling Green State University

Dr. William E. Hoffman
Department of Education
The College of Wooster

Ms. Lynda Hunter
Hamilton Public Schools

Dr. Roger Iddings
College of Education
Wright State University

Mr. Robert Alan Jenkins
Lancaster City Schools

Dr. Edward Jirik
Ohio Education Association

Mrs. Virginia Kunkle
Ohio Department of Education

Dr. John A. Kirker
College of Education
Capital University

Mr. Dal Lawrence
Toledo Federation of Teachers

Dr. Ray LeGrand
John Carroll University

Ms. Nanci Lucas
Toledo Public Schools

Dr. Charles W. Manuel
Findlay City Schools

Mr. Carol Matthews
Maumee City Schools

Mr. Charles D. Mayers
Bowling Green City Schools

Dr. John A. Masla
College of Education
Ohio University

Dr. Patricia Mills
College of Education
Bowling Green State University

Dr. Dean W. Moore
Cincinnati Public Schools

Dr. Marvin Pasch
College of Education
Cleveland State University

Dr. William Patton
Department of Education
Kent State University

Mr. Edward L. Perkins
Ashland City Schools

Dr. Gay Pinnell
Ohio Department of Education

Dr. Jerome J. Rottier
Findlay College

Mr. Richard L. Swartzmiller
Columbus Public Schools

Dr. Gene Telego
Ashland College

Mr. Sam Traficant
Youngstown Public Schools

Dr. Clyde V. Vanaman
College of Education
Youngstown State University

Dr. William Wiersma, Jr.
College of Education
The University of Toledo

Mr. Carl B. Wilkey
Cincinnati Public Schools

RESEARCH AND EVALUATION IN TEACHER EDUCATION NEEDED AND IDENTIFIED FOR OHIO

Group I. **Teacher Education Research and Evaluation in Ohio and its Congruence with National Teacher Education and Research and Evaluation.**

1. Teacher effectiveness studies should be conducted in Ohio with instruments that are being utilized in other studies throughout the United States, and Ohio results should be compared with other data.
2. Studies should be conducted at the various colleges and universities to identify relationships between teacher training and student teaching behavior and student teacher behavior and pupil behavior and outcomes.
3. A set of teaching techniques should be identified and their effects on pupil learning studied.
4. Studies should be conducted to examine the cost of implementing the sections of the new state **Standards** for teacher education.
5. Studies are needed to specify the competencies needed by beginning teachers. Ohio's interest in IGE might provide a springboard for researching the particular skills and abilities needed by beginning teachers to operate in IGE schools.
6. A study is needed to identify current and national happenings in teacher education.

Group II. **Teacher Education Research and Evaluation Implied in the New State Standards and Needed to Validate Them.**

1. Research is needed to provide evidence that criteria can be specified and used for identifying future outstanding teachers.
2. There is a need for research on the relationship between the objectives stated in teacher education programs and the graduates produced by the institution.
3. There is a need for research on the relationship between college instruction in human relations and the success of teachers in their work with pupils, other teachers, parents, etc.
4. Studies are needed to develop and determine the best diagnostic and prescriptive instruments and skills needed in clinical and field experiences to develop competent teachers.

5. Research is needed to supply the desired qualifications of the clinical professor.

6. Research is needed to determine at what points the clinical-field experience outside of student teaching is most effective.

7. Research is needed to develop a standard mode or method for cost-benefit analysis in teacher education.

8. Studies are needed to determine what inservice education cooperating teachers need to help produce an effective new teacher through student teaching and other field experiences.

9. Research is needed to determine whether the standard four year format for preservice teacher education should be retained.

10. Research is needed to provide evidence of the effectiveness of immediate inservice staff development programs for beginning teachers.

11. Research is needed to determine the most effective student-faculty ratio, using a variety of criteria. The problem includes testing the validity of the 14-1 student-faculty ratio.

12. Studies are needed to define the unique advising and counseling needs of teacher education students.

13. Research is needed to identify the physical facilities that are essential to a successful teacher education program.

Group III. **Teacher Education Research and Evaluation Desired by Separate Sectors of the Professional Education Community.**

1. Research is needed to test the feasibility, necessity, financial implications, and effectiveness of the new **Standards.**

2. Studies are needed to determine the best distribution of time for field experiences during students' total undergraduate college education.

3. As additional funds are appropriated for teacher education, studies will be needed to determine the effectiveness of the distribution to public school districts, colleges, universities, and the State Department of Education.

4. Studies are needed to test the feasibility of joint supervision of field experiences by universities and colleges through a statewide network.
5. Research is needed to test the feasibility of granting classroom teachers more responsibility for the supervision of student teachers.
6. Research is needed to identify the desired roles of school boards, citizens, and other elements of the educational community as to their specific responsibilities for the implementation of the teacher education program.

Group IV. **Coordinating and Funding Research and Evaluation in Ohio.**

1. Research is needed to validate the new state **Standards.**
2. Studies are needed to compile the school-university-parent relationships that are needed in identifying research problems.
3. Studies are needed to supply evidence that state educational schools and agencies will benefit from coordinated funding and dissemination of research results.
4. Research is needed to supply evidence that a state structure for coordinating and finding research and evaluation in Ohio is feasible and effective and will assure regional representation.